



HULK: CREATING MR. BIG P.32

Exclusive interview: Meet the Mac masters who created the Hulk.



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83
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MacAddict

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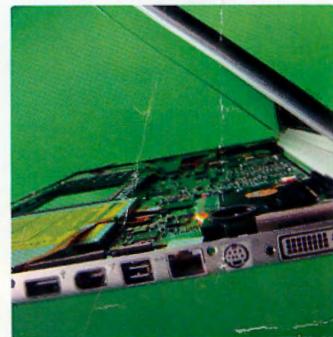
LISTEN UP!

→ iTunes Music Store

Why it's hot, what it's got—and what it's not

→ Apple's New iPods

Fantastic new features—but are they worth the upgrade?



POWERBOOK AUTOPSY

We crack open Apple's 17-inch laptop and show you what's inside

NO CASH? NO PROBLEM!

100

Best Freebies

- Free software
- Free services
- Free fun

Our expert guide to the best free stuff on the Web

HOW TO:

→ Turn Your Vinyl LPs & Audiocassettes into MP3s

→ Create a Super Video CD That Plays Like a DVD

→ Play Dance Dance Revolution on Your Mac



REVIEWED

← Pentax Optio 430RS, Apple 20-inch Cinema Display, Universal Media Drive, 15GB iPod, Master of Orion 3, PowerWave, World Book 2003 Jaguar Edition, Mercury Elite Pro FireWire 800 drive, Canon i950 Photo Printer, and much more...

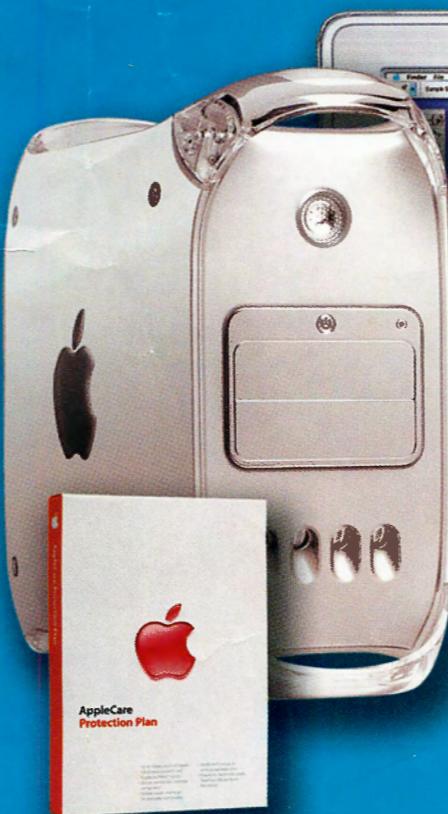
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07



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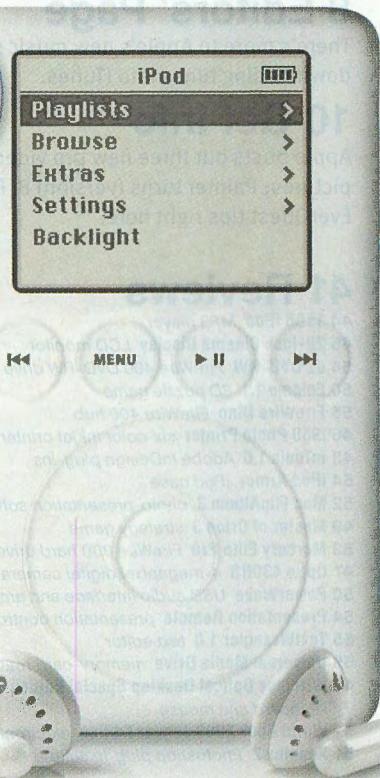
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MacAddict

features

16 Listen Up!

After days of downloading tunes from Apple's iTunes Music Store—and running up our company credit card—we report on iTunes 4, the new iPods, and Apple's foray into the music biz. **by the MacAddict staff**



20 100 Best Freebies

Who says you can't get somethin' for nothin'? Not us. We combed the Web and found the 100 best things that zero money can buy. **by David Weiss**



32 The Hulk

In our exclusive interview, the magicians at Industrial Light + Magic talk about how one little computer (the Mac) helped create one massive superhero. **by Kris Fong**

39 Inside the 17-Inch PowerBook

We open up the world's largest laptop and show you the deep, dark innards of this industrial-design wonder. **by Niko Coucouvanis**

Sadly, the Menu button doesn't access Pizza Hut.

how to

58 Ask Us

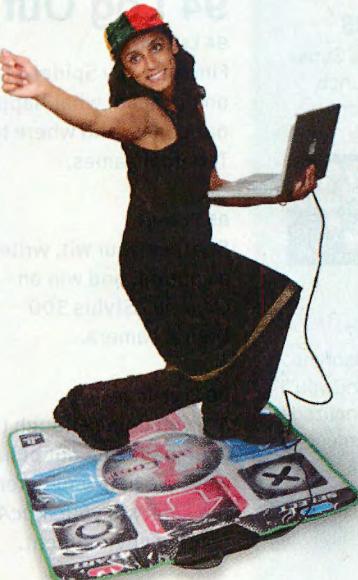
Turn printing into an AirPort Extreme sport, make those cute little URL icons, access Hotmail from Apple Mail, and run Software Update from the Terminal.

60 Digitize Vinyl and Audiocassettes

We bought Black Sabbath's *Paranoid* LP years ago—must we now buy its digital equivalent just to stick it on our iPod? Not if we do the digitizing ourselves. **by Kris Fong**



Do not play Twister with her.



66 Create a Super Video CD

In the April issue, we showed you how to create a Video CD. Now we show you how to play your own iMovies on a DVD player and get near-DVD quality—all from a measly CD-R. **by Andrew Tokuda**



68 Play Dance Dance Revolution on a Mac

Don't risk an Elaine Benes dance moment in front of the local mall rats. Thanks to the work of a team of open-source developers, you can play Dance Dance Revolution on your Mac. Find out how. **by Chris Barylick**

every month

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There's more to Apple's new music service than simply downloading tunes into iTunes.

10 Get Info

Apple busts out three new pro video apps; Palm takes pictures; Painter turns (version) 8. Plus, get your red-hot EverQuest tips right here.

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QUICK TIPS FROM THIS MONTH'S ISSUE

➔ BOOST YOUR TURNTABLE SIGNAL

To record vinyl to a Mac, you need to connect your turntable to either a stereo receiver or a preamp to boost the signal levels properly. Trust us—if you don't, your recording will sound like crap. **From "Digitize Vinyl and Audiocassettes," p60**



➔ SHUT DOWN FROM THE TERMINAL

To shut down your Mac from the Terminal's command line, use the halt command. If you're not already logged in as root, type sudo halt, then your password. **From "Ask Us," p58**

➔ RUN QUARTZ EXTREME ON A PCI VIDEO CARD

Apple says you can't benefit from Quartz Extreme unless you have an AGP video card, but you can. If you have the right

card, just install a copy of PCI Extreme, and you're all set. **From "100 Best Freebies," p20**

➔ ADD NUMBERS TO MENUS

To jump from scene to scene in a Super Video CD (SVCD), users must punch the appropriate scene numbers on their remote. To make it easier for them, add those numbers to your SVCD menu. **From "Create a Super Video CD," p64**



➔ BOOST YOUR EGO

Feeling unloved? Unappreciated? Unwanted? Just log on to www.usofyne.com and fill out a simple form, and you'll receive a personalized message guaranteed to lift your spirits. **From "100 Best Freebies," p20**



56 The Hot List

The best of the best from recent reviews. If the editors of *MacAddict* went shopping, this is what we'd buy.

94 Log Out

94 Letters

Find out why Spider-Man is wearing a paper bag on his head, what happens when you sweat on our pages, and where to find a hidden stash of Terminal games.

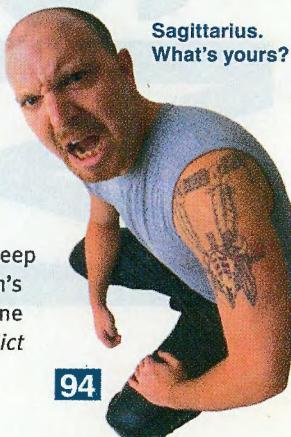
95 Contest

Sharpen your wit, write a caption, and win an Olympus Stylus 300 Digital camera.

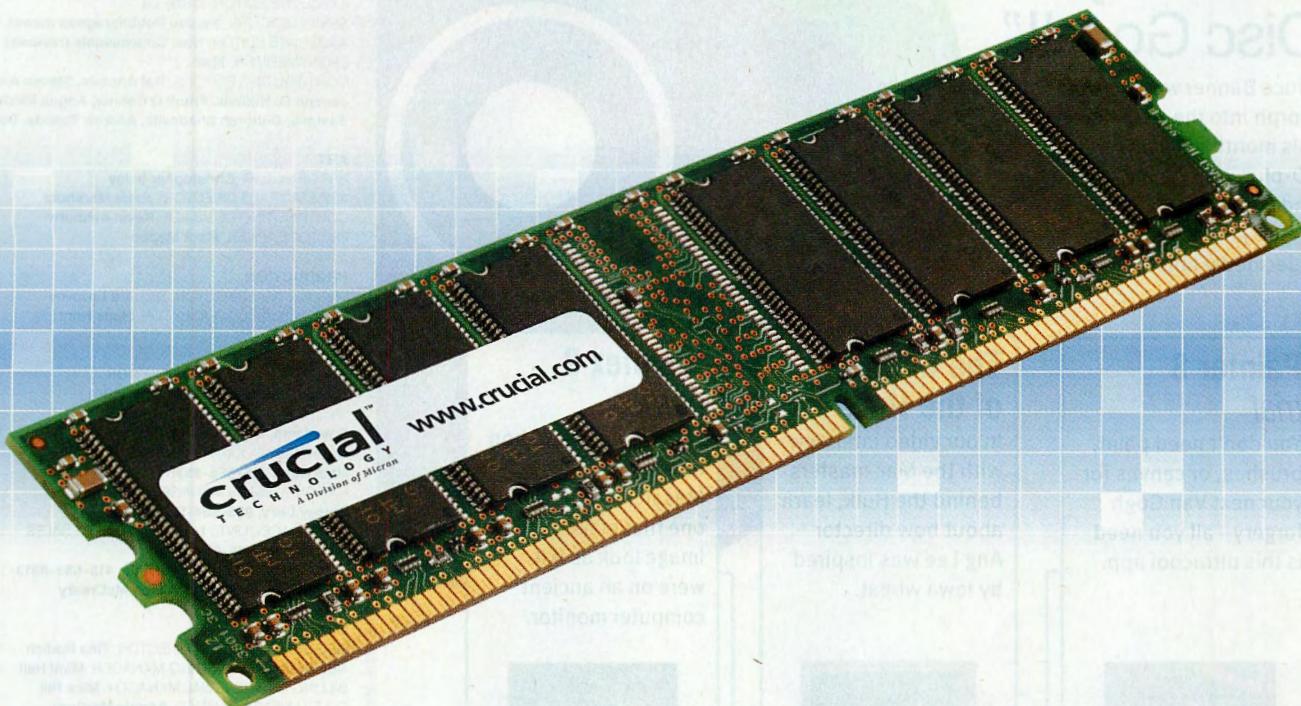
96 Shut Down

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"Hulk Say Disc Good!"

Bruce Banner would never morph into the Hulk if he had this month's Disc. With its 60-plus ways to have more fun and be more productive, he'd be far too jolly to transmogrify into a decidedly unjolly green giant.

Painter 8 trial

You don't need paint, brushes, or canvas for your next Van Gogh forgery—all you need is this ultracool app.



The Making of the Hulk

In our video interview with the Mac masters behind the Hulk, learn about how director Ang Lee was inspired by Iowa wheat.



on the Disc

AUDIO & MUSIC

- Audio In 1.0.3
- AudioCoder (Classic) 3.7.1
- AudioCoder (OS X) 3.7.1
- AudioFinder 2.0.5
- Blues Music 1.2
- Clutter 1.0d11
- Disco (Classic) 2.0
- Disco (OS X) 2.0
- Jasmine (OS 9) 1.5.7
- Jasmine (OS X) 1.5.7
- Sound Studio 2.1
- Studio365-Live demo

DEVELOPMENT

- REALbasic Classic 5.1.1 demo
- REALbasic OS X 5.1.1 demo
- TextWrangler 1.0 demo
- VLC Source 0.5.3

FUN & GAMES

- Arr 1.0
- Asteroid Storm 1.2.1
- Enigma 1.1.1 demo
- Pocket Tanks 1.00b
- pyDDR 0.6.2
- Samurai 1.0.1
- Squeaky Toy (Classic) 1.0
- Squeaky Toy Deluxe 1.0.1

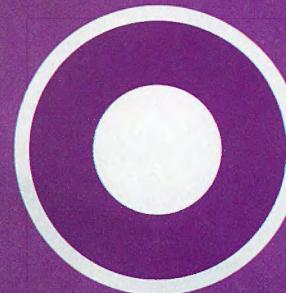
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If you don't receive the Disc with your copy of *MacAddict*, you might want to consider upgrading. Each monthly disc contains cool demos, useful shareware and freeware, and the inimitable *MacAddict* Staff Video. To get 12 issues of *MacAddict* that include this value-packed disc with your subscription (prorated if necessary) for just \$1 more per issue, call 888-771-6222—the operator will take care of everything.

EXCLUSIVE
VIDEO INTERVIEW

The Hulk

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PUBLISHER Chris Coelho
EDITOR IN CHIEF Rik Myslewski

EDITORIAL

MANAGING EDITOR Jenifer Morgan
EXECUTIVE EDITOR Cathy Lu
SENIOR EDITORS Narasus Rebba Pragada (news), Kris Fong
ASSOCIATE EDITOR Niko Coucouvanis (reviews)
EPONYMEDITOR Max VIE
CONTRIBUTING EDITORS Raf Anzovin, Steven Anzovin, Joseph O. Holmes, Frank O'Connor, Angus Pàidean, Ian Sammis, Deborah Shadovitz, Andrew Tokuda, Buz Zoller

ART

ART DIRECTOR Christopher Imlay
ASSISTANT ART DIRECTOR Peter Marshutz
CONTRIBUTING DESIGNER Kevin Ashburn
PHOTOGRAPHER Mark Maledo

PRODUCTION

PRODUCTION DIRECTOR Richard Lesovoy
PRODUCTION COORDINATOR Hans Hunt

ADVERTISING

EASTERN ADVERTISING DIRECTOR
Bernie Lanigan, 212-768-2966 x4001
WESTERN ADVERTISING DIRECTOR
Dave Lynn, 949-360-4443
NATIONAL ACCOUNT MANAGER
Nate Hunt, 415-656-8536
NATIONAL SALES MANAGER
Stacey Levy, 925-984-1205
SENIOR ACCOUNTS MANAGER, DIRECT SALES
Ana Epstein, 415-656-8416
AD COORDINATOR Jose Urrutia, 415-656-8313
MARKETING MANAGER Alison McCreery

CIRCULATION

GROUP CIRCULATION DIRECTOR Tina Rodich
NEWSSTAND MARKETING MANAGER Mimi Hill
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Mo' Music

The iTunes Music Store is changing my life.



Right before Steve Jobs announced Apple's new iTunes Music Store to the assembled media horde, the PA in the auditorium was playing, fittingly enough, Bob Dylan's "The Times They Are A-Changin'."

They certainly are. The music biz will never be the same.

I've only spent a few hours exploring the Music Store, but despite its faults and limitations, it is, IMHO, the Best Thing Since Sliced Bread. See "Listen Up!" on page 16 for the official *MacAddict* take on the Store and its offerings—oh, and check

out our review of the new iPod on page 44.

Then download a free copy of iTunes 4, sign yourself up for a Music Store account, and stroll up and down the aisles of the Store. You'll find that it provides not only a convenient way to buy music, but also a great way to waste inordinate amounts of time enjoyably.

Want to compare different versions of old standards? Easy. Ask iTunes' Power Search to look for "Over the Rainbow," and you can listen to 34 different 30-second snippets, including versions by Kathie Lee Gifford, Louis Prima, and Plácido Domingo. Gershwin's "Summertime"? There are 67 versions—make sure to note the subtle differences between the styles of Kiri Te Kanawa and Rick Nelson.

Another highly entertaining time-waster is browsing your coworkers' playlists. iTunes is Rendezvous-aware, so if anyone on your network enables Share My Music in iTunes' Sharing preferences pane, his or her entire iTunes Library—or just the playlists that person wants to make public—will automatically show up in your iTunes Source window.

Without this handy feature, I wouldn't have known that *MacAddict* editor Narasu Rebbapragada is a fan of both Slayer and Johnny Cash. And I might never have discovered Dirt Bike Annie.

Or learned that Art Director Chris Imlay is heavily into both 1960s French pop and the Flaming Lips. Or, for that matter, my coworkers might never have discovered my Zappa addiction. They might even come to share my affection for Syrian dance-party tunes.

One thing's for sure, though: Thanks to the iTunes Music Store, we're all being exposed to far more music than we were a week ago. And that's mighty, mighty cool.

Enjoy, 

from the editor's desktop

MUSIC YOU WON'T FIND IN THE ITUNES MUSIC STORE

Although 200,000 tunes may sound like a lot, there's far more music *not* in the Music Store than in it. Here are a couple of other sources worth checking out.

The Shaggs

www.shaggs.com

Astonishing. Indescribable. They were either primitive geniuses or simply very, very bad. If you've never heard "My Pal Foot Foot" or "Philosophy of the World," you owe it to yourself to meet the band Frank Zappa called "better than the Beatles."

National Cleveland-Style Polka Hall of Fame

www.clevelandstyle.com

The music of my people—a true gem. Seriously, I mean, where else can you find the lyrics to "Ej, Prijatelj" by Lojze Slak, or the insightful biographies of Jack "The Buddy Rich of Polkas" Tady and Frank "America's Polka King" Yankovic?

Lookout Records

www.lookoutrecords.com

Some bands don't have major contracts because they're not good enough. Others don't because they prefer to remain independent. Lookout Records is home to more than 100 of the latter—OK, and also a couple of the former.

Digital Droo

www.digitaldroo.com

This one's simply a shameless plug for a friend. Digital Droo (aka former *MacAddict* editor Andrew Tokuda) hasn't made it big yet, but he will...oh, he will. Listen to his stuff now so you can one day say "I knew him when."

STAFF RANTS

Q: What will people learn about you when they browse your iTunes library?



Narasu Rebbapragada DDR QUEEN

[What will people learn about you when they browse your iTunes library?](#)

That I have an incurable weakness for bouncy Latin pop music.



Niko Coucovanis EREMITICIST

[What will people learn about you when they browse your iTunes library?](#)

That I'm generally antisocial. Now go away. But not too far.



Kris Fong CAST-IRON MAIDEN

[What will people learn about you when they browse your iTunes library?](#)

Probably that I'm a metal head at heart—I keep the really incriminating stuff well hidden.



Cathy Lu PEARL JAMICIST

[What will people learn about you when they browse your iTunes library?](#)

That it's a sad statement of how stuck I am in the 1980s and early 1990s.



Jenifer Morgan PRESIDENT, DR. TEETH FAN CLUB

[What will people learn about you when they browse your iTunes library?](#)

That *The Muppet Movie* still has a place in my life. I'm still looking for that Rainbow Connection.



Chris Imlay TOUCHY ARTSY GUY

[What will people learn about you when they browse your iTunes library?](#)

That I am an intolerable bastard. That the music I like is as annoying as I am.

There's a new member of the *MacAddict* Brotherhood. Meet Assistant Art Director Peter Marshutz, formerly of *BusinessWeek* and the British-American Chamber of Commerce. But don't let his stuffy credentials fool you—he fits right in with our loony crew: He's equally insane.



Peter Marshutz ANOTHER TOUCHY ARTSY GUY

[What will people learn about you when they browse your iTunes library?](#)

I'm slim, trim, and tough—able to manage many lists and tasks while on the go, never tripping, skipping, or missing a beat.



Max DISSIMULATIONIST

[What will people learn about you when they browse your iTunes library?](#)

That I have never, ever used Napster, LimeWire, or Drumbeat to download free music from the Web. And that I'm a pathological liar.

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APPLE'S ALL-STAR LINE UP

Pro Video Apps for Movie Pros

Those of you working in multimedia or film: Feel special. Apple loves you. It has announced revamps of three pro apps—Final Cut Pro 4, Shake 3, and DVD Studio Pro 2—with new features designed to woo high-end broadcasters. Combined with Apple hardware, they are positioned to give their hardware-based competitors a one-way ticket to Obsolete-ville.

Final Cut Pro 4

The biggest news is Final Cut Pro 4 (www.apple.com, \$999), the latest rev of Apple's popular nonlinear video editor, due out in June 2003. Apple has overhauled the app to make it more attractive to professional broadcasters, letting you view real-time video effects on an NTSC monitor without having to render first. (Final Cut Pro 3 currently has no real-time NTSC preview capability.)

Type types will like Final Cut's new LiveType, which lets you enter and style

animated text quickly and easily. It's based on Apple's new LiveFont standard, which supports a 32-bit alpha channel so you can key in text over video. You can tweak individual characters, view your work in a wireframe view, and share effects between projects. To get you started, Final Cut comes with some free fonts and animated object styles. If LiveType looks familiar, it's because it used to be called India Pro. Apple purchased the titling tool from Prismo Graphics back in June 2002.

Rounding out the new video features is a new multichannel, onscreen audio mixer for adjusting volume and fades. Final Cut also comes bundled with Soundtrack, a stand-alone app that lets you combine and arrange looped music to create royalty-free soundtracks. As with LiveType, Apple includes royalty-free instruments, sound effects, and plug-ins to get you started.

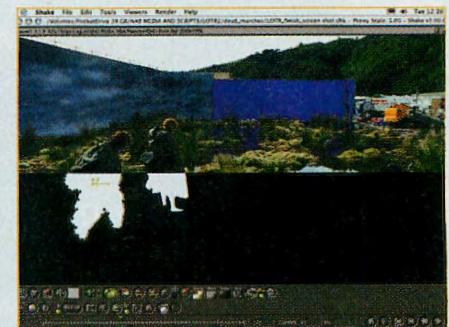
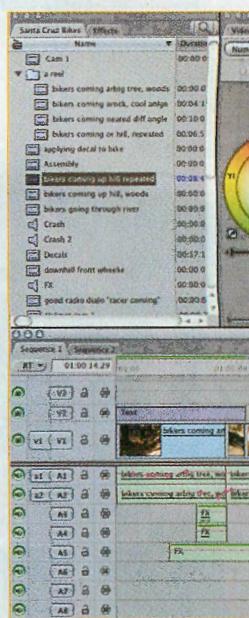
No software upgrade would be

complete without a productivity boost. To that end, Apple lets you customize keyboard shortcuts (à la QuicKeys) and export your keyboard layout to other Final Cut Pro 4 users.

A few other enhancements that will appeal to professional film broadcasters are the 8- and 10-bit uncompressed YUV HD and SD codecs, the Compressor MPEG-2 encoder for creating high-quality DVDs, and high-end color-correction tools to fix lighting inconsistencies. Apple now bundles Cinema Tools (previously sold separately for \$799) for those who want to digitize their film and 24P HD video for editing in Final Cut Pro 4.

Shake

It's hard for most Mac users to wrap their heads around Shake (\$4,950, www.apple.com) and its importance in



Compositing and effects program Shake 3 speeds up rendering.

STAR USERS

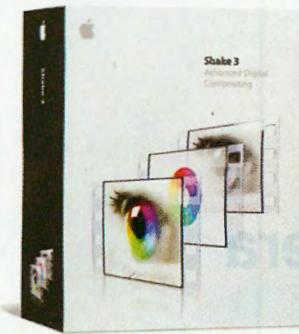
Bigwigs who use Final Cut Pro, DVD Studio Pro, and Shake. Just to give you an idea of how big Apple's pro users can be.

| FILM | Full Frontal | Lord of the Rings | Nine Inch Nails Live DVD |
|-----------|---------------|-------------------|--------------------------|
| MADE WITH | Final Cut Pro | Shake | DVD Studio Pro |

[fact]

APPLE SOLD ONE MILLION SONGS DURING THE OPENING WEEK OF ITS ITUNES MUSIC STORE.

GET INFO



Maybe Jobs's own Pixar Studio can join us on the Mac side.



Final Cut Pro 4 gets new audio and video boosts.

DVD Studio Pro 2

And for those crafting DVDs, Apple has revamped DVD Studio Pro 2 (recently reduced to \$499 from \$999, www.apple.com) with more of those loveable (and customizable) background templates. The new Menu Editor lets you do more interface work within the app itself with tools for designing text, buttons, and menus. Plus, context-sensitive drop palettes let you more easily create new tracks, link to tracks, make slide shows, and manage chapter indexes—all without having to make repetitive forays into menus. The newly designed track editor, based on Final Cut Pro's timeline, lets you work with up to eight video angles, eight audio tracks, and 32 subtitles. DVD Studio Pro also includes the Compressor batch-transcoding tool. DVD Studio Pro 2 is due out in August 2003.

Now that these new pro apps—when added to Power Mac G4, Xserve, and Mac OS X systems—have completed Apple's comprehensive high-end video system, maybe Steve Jobs's own Pixar Studio (rumored to run on Linux and Silicon Graphics workstations) can join us over on the Mac side.—NR

the professional film world, but Apple's acquisition of it from Nothing Real back in February 2003 was a huge deal. Essentially, Shake is the industry-standard compositing and effects program used on major motion pictures such as *Lord of the Rings*. (See "Star Users" for more on Apple's celeb clientele.) It can do anything from adding backgrounds and computer-generated characters to moving video, removing flaws, and fixing color—all to make movies look spectacular yet realistic.

Rendering video with special effects takes a lot of processing power, so the name of the game is speed. With Shake 3, Apple has added jet engines. Shake 3 will still support Irix (from Silicon Graphics) and Linux platforms; however, Shake 3's bundled Qmaster rendering-management software for Mac OS X only and has been specially configured to boost the rendering speed of Power Mac G4 and Xserve clusters. It should be available in June 2003.



DVD Studio Pro 2 gets new backgrounds.

SCREENSHOTS AND PHOTOGRAPHY COURTESY OF APPLE

NEW STUFF

TIVO FOR MAC

Tivo Home Media Option

| | |
|--|----------------|
| \$99 | Available: Now |
| www.tivo.com | |

Now TiVo Series2 subscribers can use their TVs to view photos and listen to music stored on their Macs. The new TiVo Home Media Option connects TiVo Digital Video Records to wired and wireless Mac networks and remotely schedules same-day TV shows.

YOUR INTERNET RADIO STATION

Studio365-Live for Mac

| | |
|--|----------------|
| starts at \$4.95 per month | Available: Now |
| www.live365.com | |

With the Studio365-Live for Mac app, you can upload your MP3s and iTunes playlists to the Live365 network and broadcast them to Live365 listeners. The Intro Broadcasting Package (\$4.95) gets you 100MB of server space. The Premium Broadcasting Package (\$14.95 per month) adds live broadcasting.



The Pro Broadcasting Package (\$75 per month and up) is for commercial use.

1GHZ UPGRADE CARD

1GHz Sonnet Encore/ZIF Upgrade Card

| | |
|--|----------------|
| \$699.95 | Available: Now |
| www.sonnettech.com | |

Sonnet unleashes a new 1GHz upgrade card for Macs with ZIF processor sockets. That means beige Power Mac G3s, although upgrades for Blue-and-White G3s and PCI graphics G4s are expected soon.

INKJET MULTIFUNCTION PRINTER

Brother MFC-4820c

| | |
|--|----------------|
| \$299.99 | Available: Now |
| www.brother.com | |

The latest multifunction printer comes with a four-color inkjet printer, 600-by-2,400-dpi color flatbed scanner, fax machine, and built-in answering machine. Plus it prints directly from popular digital-camera media formats such as CompactFlash, SmartMedia, and Sony Memory Stick.



DROOLWORTHY

Sexy Stuff We Can't Wait to Get Our Mitts On

◀ Palm Camera

Palm Zire 71

James Bond would love the Palm Zire 71 (\$299, www.palm.com), a PDA with a spylife built-in digital camera. Just slide the device open, and the Zire 71 turns into a camera that can take up to 640-by-480-pixel pictures. The Zire 71 also plays MP3, Real Audio, Audible content, and videos via the included Kinoma Player.—CL

PHOTOGRAPH COURTESY OF PALM

All-Purpose Camcorder ▼

Canon Optura 20 DV

With its Super Night and Low Light modes, Canon's new sub-\$1,000 video camera (\$999, www.canondv.com) lets you lurk in the dark taking all sorts of video and adding digital effects such as wipes, fades, black-and-white tone, and sepia color. The camera also doubles as a 1.33-megapixel still camera with a 16x optical zoom lens and MMC and SD card slots for storing your pictures.—NR



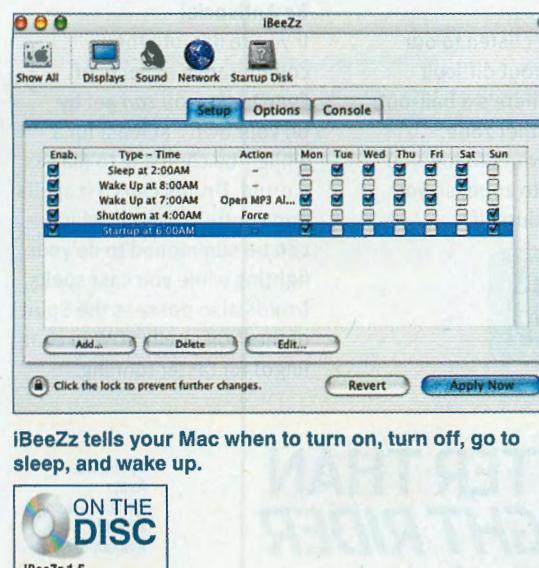
PHOTOGRAPH COURTESY OF CANON

SHAREWARE PICK OF THE MONTH

iBEEZZ

Olivier Delécluse • <http://ibeezz.reboute.net> • \$10

Imagine waking up each morning to a QuickTime movie of birds tweeting, traffic beeping, or your boss screaming. Whatever your pleasure, iBeezz can help you out by scheduling what time your Mac starts up, shuts down, restarts, sleeps, and wakes up. This Mac OS X Cocoa app can launch files, applications, and AppleScripts, so you can turn your Mac into an alarm clock and let it conduct other time-consuming tasks unattended.—Andrew Tokuda



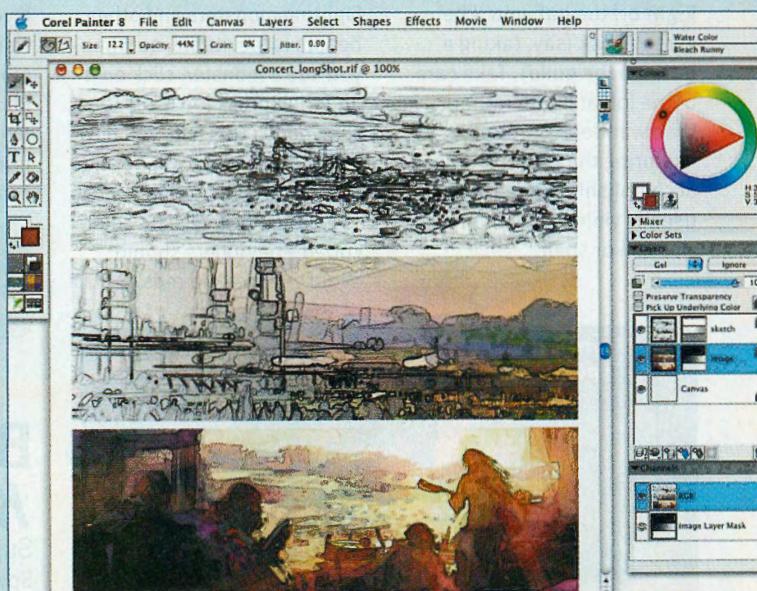
iBeezz tells your Mac when to turn on, turn off, go to sleep, and wake up.



WHAT'S NEW IN PAINTER 8

Corel Adds More Fine-Art Features

Corel's Painter 8 (\$299, www.corel.com/painter), due out in May 2003, adds more natural-media tools for fine artists who paint and draw on the Mac. Its new Mixer palette lets you swoosh together colors as you would on a traditional paint palette. A new Brush creator complements the 400 brushes Corel already gives you. The Sketch effect converts photos to line drawings, and the Digital Water Color feature gives you watercolor powers. Corel also revamped Painter's interface, upped support for Photoshop files, and added a Tracker palette for remembering recently used brushes.—NR



Corel's Painter 8 is one of the most comprehensive painting apps around.

NEWS OF THE MONTH

A FLOPPY DISK RAID

Mac users do the darndest things. Daniel Blade Olson used a Bondi Blue iMac (updated to 500MHz), five connected 1X USB floppy disks, and Mac OS X's Disk Utility to create a floppy disk RAID with a whole 3.9MB of storage space. Check out his work at http://ohlssonvox.8k.com/fdd_raid.htm.

NEW MAC CLONE

Enterprising engineer John Fraser plans to produce a Mac clone that's come to be known as the iBox, an economically priced box that doesn't include an LCD screen and is priced below Apple's current iMacs. Fraser's Web site (<http://2khappyware.com>) says that Other World Computing (www.macsales.com) pledges to sell the iBox should the project come to fruition.

APPLE STORE IN JAPAN

Bloomberg and Nikkei English News report that Apple will be opening its first official Apple Store in Tokyo later this year in the chic Ginza shopping district.



CHECK.MAC FROM WAP

A company called WAPMac (www.wapmac.com) is offering a service that allows you to check your .Mac mail account on your WAP-enabled mobile phone. Go to <http://wapmac.com/mac> using your mobile phone's browser to sign up. Checking your mail is free. Sending it costs a one-time-only \$15.

NEW TO EVERQUEST?

Tips on Surviving the Mania

EverQuest, the PC's massively popular massively multiplayer online role-playing game, is coming to the Mac. If you're nervous about playing alongside rabid EverQuest veterans, heed the following advice of the Mac port's lead programmer Westlake Interactive President Glenda Adams, who's spent the last year playing the game.—CL

EverQuest
Sony Online Entertainment
www.everquest.com
Price TBD
Available: Summer 2003



Beasts abound in the wide worlds of EverQuest. Team up with other players to defeat the real bad-asses.

Do Your Chores

Right off the bat, you'll be given a task (say, taking a letter to the guild). Take care of the job at hand, rather than wandering around exploring the world, because accomplishing the task will usually yield you your first weapon or spell.

Pick Your Beast Battles

Fighting monsters and other beasts is inevitable, so when you see a monster, click on it and then press the C key to *consider* it. This tells you how difficult your fight will be and how well you'll probably fare. The difficulty levels are color-coded—beginners should avoid yellows and reds.

BloodRayne's rated O. That's Type O.



BLOODRAYNE: ACTION, ADVENTURE, BLOOD

Vampire Vixen Sinks Her Teeth into Mac OS X

In this gothic third-person action shooter, you play Agent BloodRayne, a sexy half-breed vampiress on a mission to stop Nazis from dabbling in the occult.

Your main weapons for dismembering your foes are scythes attached to your arms. Submachine guns, pistols, and harpoon-style knives also come in handy.

Agent BloodRayne enjoys inhuman agility, superspeed, enhanced vision, and bullet-time slow-mo speed (à la Max Payne). She also feeds on blood, which (naturally) gives her übervampire abilities.—Matt Osborn

BloodRayne
Aspyr
www.aspyr.com
\$29.99
Available: Now

Run Away

If you didn't listen to our warning about difficult monsters, here's a bail-out: Run to another zone. Monsters won't follow you from zone to zone, so you can save yourself.



Be Antisocial

If you're not into the collaborative aspects of EverQuest, you *can* get by on your own—at least for a while—by choosing to play as a druid. Druids can cast spells and control animals, which can be summoned to do your fighting while you cast spells. Druids also possess the Spirit of the Wolf spell (SOW in chat lingo) for faster running.

BETTER THAN KNIGHT RIDER

Supercar Goes Spy Hunting

SpyHunter, a remake of the 1980s classic arcade hit, speeds to the Mac with guns blazing. In this game, you fight an evil megalomaniac corporation with the aid of a high-tech, high-speed vehicle called the G-6155 Interceptor, which morphs from a car into a motorcycle, jet ski, or speedboat—depending on your terrain. Blow away enemy cars, boats, and helicopters using offensive (machine guns) and defensive (oil and smoke) weapons, and of course, your trusty weapons van. As of press time, no online or multiplayer details had been released.—MO



SpyHunter
Aspyr
www.aspyr.com
\$29.99
Available: Now

Make David Hasselhoff proud.



Unreal TOURNAMENT



2003

THE TOURNAMENT RETURNS TO MACINTOSH JUNE 11



www.macsoftgames.com

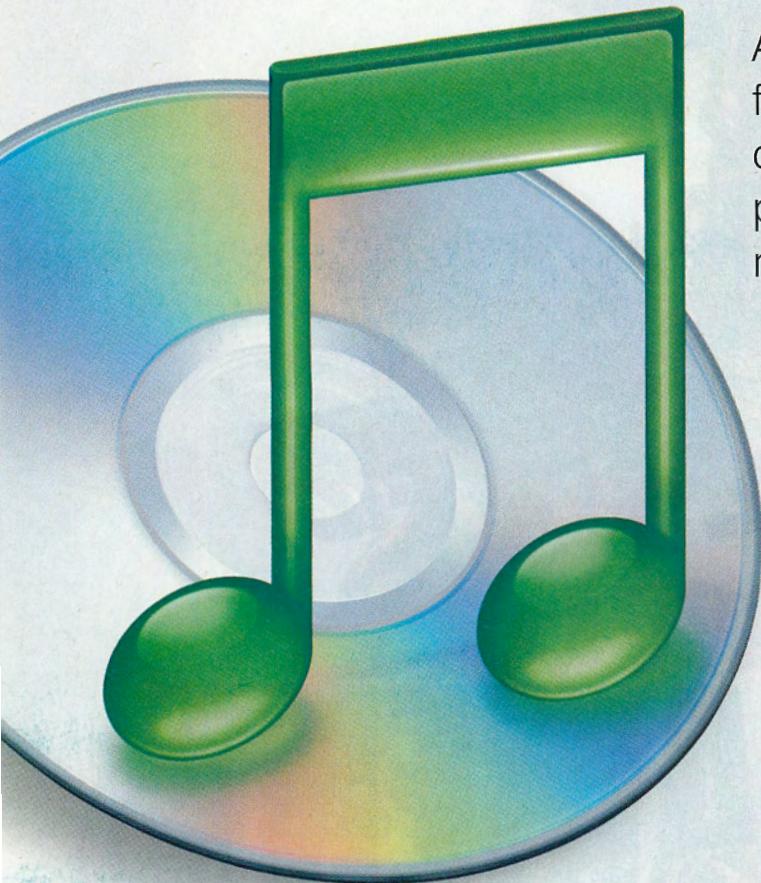


BLOOD AND GORE
VIOLENCE



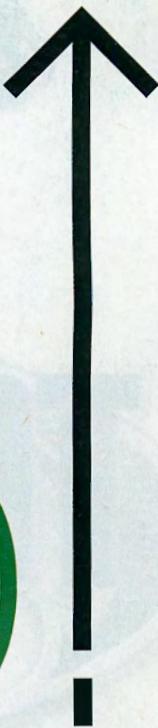
MacSoft

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Apple has always been at the forefront of innovation. But now it's done something no one thought possible: loosened up the stodgy music industry.

listen up!



www.macaddict.com



by the MacAddict staff

A year ago, it seemed unlikely that the music industry and computer users could ever coexist. But with its new music service, Apple has shown that it can keep both record companies and music consumers happy.

First, Apple got what Steve Jobs calls the "Big Five" record labels on its side: BMG, EMI, Sony, Universal, and Warner. Then it built an absolutely killer online store that's beautifully integrated with the new iTunes 4. Finally, it struck the right balance between consumers and uptight music companies, charging only 99 cents a track but limiting the buyer's ability to pirate. To sweeten the deal, Apple tweaked the iPods that'll carry all those tunes, making them thinner, lighter, and more droolworthy than ever.

Apple says it wants you to love music again. With the introduction of the iTunes Music Store, an updated iTunes, and better-than-ever iPods, it may have succeeded.

iTunes Music Store

In an effort to obsolete illegal file-swapping services like LimeWire, Drumbat, and the Mac-unfriendly Kazaa, Apple has thrown its hat into the music-delivery biz. Built into the new iTunes 4, the iTunes Music Store lets you buy individual songs and whole albums, a feat that could drive the drive to Tower Records into obsolescence.



The iTunes Music Store has exclusive Web pages, tracks, and videos from artists like U2 and Alicia Keys.

Through licensing arrangements with the Big Five (Steve Jobs has said that music from independent labels will come later), the iTunes Music Store launched on April 28, 2003, with 200,000 tracks. Individual 128-Kbps AAC-encoded songs go for 99 cents a track. (AAC is an MPEG-4 format that compresses files so they're smaller than MP3s while maintaining excellent sound quality.) Albums cost \$10 and up. Apple's one-click buying scheme means that the music you buy downloads instantly into a Purchased Music playlist, along with a thumbnail of the album cover.



In your iTunes Preferences, you can choose to share your music with others on your network.

WHAT YOU CAN AND CAN'T DO

What's unique about the service is that it balances the needs of music buyers with the messy issue of copyright protection. Freebie services like Gnutella and Kazaa operate on very shaky legal ground, while legitimate, subscription-based services like Pressplay (www.pressplay.com) and Rhapsody (www.listen.com) have yet to really take off. The Music Store, on the other hand, is an instant success—visitors downloaded over 1 million tunes in its first week of existence.

Apple puts limits on what you can do with purchased music, but the restrictions are light—and they make sense. You're free to burn tracks to CD as long as you change your playlist every ten burns. You can download your music onto an unlimited number of iPods and onto three authorized Macs. If you get a new Mac, you can move the authorization to the new machine.

MINGLING WITH RENDEZVOUS

People using iTunes 4 on the same IP network can listen to each other's music with the app's new built-in support for Rendezvous, Apple's technology that allows devices to automatically discover each other. All you have to do is go to iTunes Preferences, choose Sharing, and pick whether to share your whole library or just selected playlists. If they like what they see, Mac OS X users on the same network can listen to your streamed music (via the iTunes Source pane). Oh, and the key word here is *streamed*, not downloaded—that would be illegal.

"I can mix and match the songs I like and feel that I'm giving back to the artist."
—Josh Groban, opera vocalist

Now here's something Apple neglected to mention: To stream music purchased from Apple, you have to give people authorization (and you're only allowed three). Plus, you have to give them the password to your iTunes store account—make sure these are trustworthy friends.



The iTunes Music Store offers a motley assortment of tracks.

A NEW WAY TO SEARCH

In addition to seamless integration with iTunes 4, another nice feature of the Music Store is its browsability. You can search for music by song, album, artist, or genre. The browse feature,



The Music Store lets you browse music titles by category.

which lets you look for music by genre in a column view, is great if you don't know exactly what you're looking for. Also, you can play a 30-second preview of any tune just by double-clicking the song title.

While we dig the service—its ease of navigation, quick download times, and 99-cent price tags—we did find some stuff to complain about. First, you can't find *everything* the way you could with Napster (see "What Does 200,000 Songs Mean?" below). Plus, the service offers only a partial number of tracks from many albums, and some artists (such as Madonna) are absent altogether.

"With the new technology, what is really happening is that the need for physical inventory is being quickly eliminated."

—Seal, rock artist

Of course, the Music Store is brand new. Apple says it will keep adding songs, as well as release a Windows version by the end of the year. Apple now treads where countless others flounder. Hopefully, its unique position—its ability to control the tunes, the software, and the hardware—is a winning combination.

New iPods

According to Steve Jobs, Apple has sold 700,000 iPods. If you're already the proud owner of one, we're sorry, because the new iPods are so cool that you'll want to upgrade immediately (see our review on p44). And this is why.

More capacity The new iPod comes in three models: 10GB, 15GB, and 30GB models (previously 5GB, 10GB, and 20GB). According to Apple, 30GB equates to 7,500 songs—more if all you listen to is punk.

Lighter and thinner form factor The 10GB and 15GB models measure .62 inches thin and weigh 5.6 ounces light (and we thought our original 1-inch-thick iPods were small). The 30GB iPod is .73 inches thick and weighs 6.2 ounces—unfortunately, hard drive space does have its price.



PHOTOGRAPH COURTESY OF APPLE

What Does 200,000 Songs Mean?

While it sounds like a lot, a collection of 200,000 songs isn't all that vast when you consider the number of songs out there, each with 50 renditions—plus remixes, remasters, live versions, acoustic versions...you get the picture. We put the variety of the iTunes Music Store's offerings to the test—to do that, MacAddict staff members searched for artists and songs in our own favorite genres of music.

Classical

If you're shopping for classical music, the iTunes Music Store won't tempt you to reschedule your next trip to Tower Records. The selection is sparse: There's only one version of Beethoven's "Für Elise," for example, and neither Debussy's string quartet nor Ravel's blatant rip-off of it are available. Also, the per-song pricing structure doesn't make sense. Want to pay 99 cents for the 39-second "Procession of the Wise Elder" movement from Stravinsky's *Le Sacre du Printemps*? Didn't think so.

Jazz

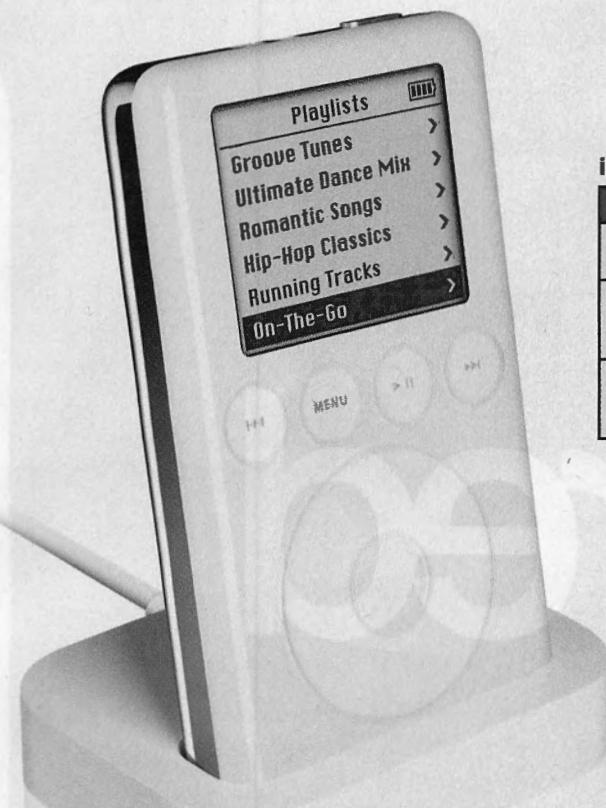
Shopping for jazz is a crapshoot—with emphasis on the word *crap*. Five Kenny G albums, no Anthony Braxton. Three Richard Elliot albums, no Rova Saxophone Quartet. To be fair, Archie Shepp and Kenny Garrett are well represented. Sun Ra even makes a brief appearance. But still...24 versions of "Georgia on My Mind" not including Ray Charles's?

World

If your taste in world music runs to the slick, smooth, and commercial, you'll find a good selection, from Youssou N'Dour to Sheila Chandra—interesting, if not arresting. If you're looking for less-homogenized sounds, you're in for a letdown: no Fayrouz, no Lado—not even Ray Budzilek and His Cleveland All Stars, fer chrissake. On the bright side, King Sunny Ade's up there, and we're spared from Zamfir, King of the Pan Flute.

Other

To sample the offerings in the gloriously vague genre of *Other*, we searched the Store for the kind of junk we used to look for on Napster (um, we mean the kind of junk *others* found on Napster). Soundtrack from the original *King Kong*? Nada. The *Unseen's* cover of "Beat It"? Nope. The Eric Cartman remix of "Smack My Bitch Up"? Um, no. But there's hope. Bowie's elusive "The Man Who Sold the World" is there, as is U2's first (and last decent) LP, *Boy*.



iPOD STATS

| Model | Number of Songs It Holds | What It Comes With | Price |
|-------|---|---|-------|
| 10GB | 2,500 (128-Kbps AAC format, 4-minute songs) | Earbuds, power adapter, FireWire cable, four-pin-to-six-pin FireWire adapter | \$299 |
| 15GB | 3,700 | Earbuds, power adapter, FireWire cable, four-pin-to-six-pin FireWire adapter, dock, carrying case, wired remote | \$399 |
| 30GB | 7,500 | Earbuds, power adapter, FireWire cable, four-pin-to-six-pin FireWire adapter, dock, carrying case, wired remote | \$499 |

Dock While the new iPods still connect via FireWire, they now sport a dock connector instead of a FireWire port. You can plug the included cable into the connector on the bottom of the iPod, or into the new iPod dock. The dock also features a line-out port so you can hook it up to a stereo. Plus, there's more good news for Windoze users: A \$19 cable set will sync your iPod to your computer via USB 2.0.

On-The-Go playlists You can now build a playlist on your iPod. Just highlight a song, album, playlist, or whatever—then press and hold the Select button to make that item appear in a playlist called On-The-Go.

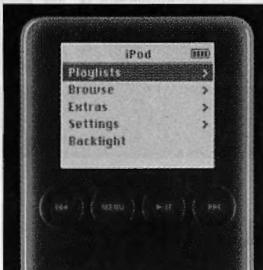
Personalized main menu You can also personalize your main menu. Simply go to Settings > Main Menu, and toggle different options, such as Artist, Songs, and Contacts, on and off.

AAC decoding The new iPods support AAC decoding, which you need to play music purchased from the iTunes Music Store. Those of you with older iPods can play AAC files as well. Just update your iPod software to version 1.3 (available from www.apple.com).

Alarm clock and games The new iPod can wake you up and entertain you even better than previous models. It has an alarm clock that beeps or plays a selected playlist, and it includes two new games: Solitaire and Parachute.

Solid-state buttons You'll notice right away that the controls are located in a new place—above the scroll wheel. But what you can't tell from the pictures is that the buttons are now solid state (meaning no moving parts), just like the scroll wheel Apple introduced in the last generation of iPods.

Backlighting Not only does the screen have backlighting, but also the buttons light up red when backlighting is activated. Speaking of which, to turn it on you just hold down the Menu button for a couple of seconds or select Backlight from the new Main Menu (more on that later).



Alternative and Hard Rock

The Store features a decent selection of bands, including where-are-they-now fogies like Depeche Mode, the B-52's, and Silverchair; Billboard chartsters like U2, Nirvana, and No Doubt; and recent artists such as Audioslave, Disturbed, and the Vines. Heck, we've gotta give Apple props for including some obscure stuff like Blue Murder and Edna's Swap. Who's absent? Linkin Park, Foo Fighters, and Red Hot Chili Peppers.

Teen

Our researcher—an authentic 15-year-old girl—claims that the selection is erratic, but overall it's a great way to waste (uh, invest) Dad's money. Ja Rule, Coldplay, Eminem, System of a Down, and Nelly are all available, as are 50 Cent, Avril Lavigne, and Good Charlotte. Our opinionated expert was also pleased to see a total lack of Justin Timberlake.

Classic Rock

The Music Store offers a wide variety of songs from many of the greats, from Eric Clapton to the Eagles, Van Morrison to Steve Winwood. However, a number of notables are missing: Queen, the Rolling Stones, Creedence Clearwater Revival, the Grateful Dead, and—gasp—the Beatles.

Indie

To look up how well indie artists are represented, we checked out the Music Store's Alternative genre—the closest we could come to indie. Unfortunately, we found out that Alternative is an alternative to...well, not much. Here's a sampling: Hootie & The Blowfish, Pearl Jam, Tori Amos, Sheryl Crow, Lyle Lovett, Iron Maiden, and Dwight Yoakam. Art Director Chris Imlay says that if he'd stocked any of these in the Alternative section of the record store he used to work for, he'd have been fired. Still, Alternative is a good place to check out new stuff from former indie stalwarts who made the jump to major labels, such as the Flaming Lips or Built To Spill.



The MacAddict editors are learning all kinds of blackmail-worthy info about what kinds of dorky music their coworkers like.

one hundred BEST FREEBIES

Enhance your Mac—and your life—
without spending a cent.



ON THE DISC
100 Best Freebies URLs,
Asteroid Storm 1.2.1,
Blues Music 1.2, Carbon
Copy Cloner 2.1.6,
Clutter 1.0d11, Flaming
Pear Freebies 1.6, Font
Explorer 1.0, IX Screen
Effects 1.2, Little Office
1.6, Slick Sampler,
SpirographX 1.0, Splat
1.0 demo, TinkerTool
2.32, and Xinema 1.0.3

Like a kid in a candy store, you're surrounded by tempting goodies every time you venture onto the Web. A ton of them are free. And free is good.

The problem is that scads of those freebies aren't worth downloading. There are a precious few, however, that can change your life for the better.

So how do you sort through this barrage of no-cost offerings?

Easy. You let us do it for you. Our expert team of picky penny-pinchers scoured the Web far and wide to bring you 100 free apps, add-ons, and services—each of them a treat, each of them tested and certified compatible with Mac OS 10.2.

Oh, and by the way, our definition of "free" includes donationware—freeware created by folks who will accept any monetary appreciation you'd care to shower upon them out of the goodness of your heart. We didn't, however, include shareware, which the authors expect you to pay for. (And remember: Not paying for shareware is double-plus uncool.)

With a Mac and a Web connection, the world is your digital oyster. So without further ado, here's the official *MacAddict* guide to the best 100 things out there waiting for you—all for the low, low price of zip, zilch, zero, nada.

by David Weiss

Customization

MAC OS X THEME CHANGER

TOP PICK

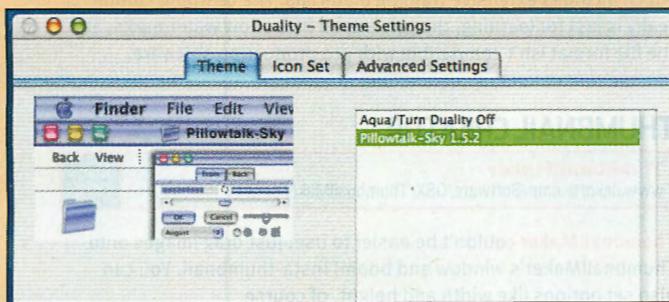
Duality

<http://conundrumsoft.com>

Mac OS X

Apple doesn't encourage people to tinker with the look and feel of Mac OS X. But that didn't stop the Conundrumsoft folks from creating **Duality**, a utility that lets you replace your user interface with alternative themes.

Themes alter the look of windows, menus, icons, cursors, progress bars, and such. Duality makes it simple to switch from one theme to another, and to easily return to your original look, keeping a backup and offering a restore feature. Each time you launch no-cost Duality, however, you have to deal with a pop-up window asking you to upgrade to a Pro version—for a fee, natch.



Duality puts a new face on your Mac.

MAC OS X THEMES

AquaWorld

www.stretch.tc/aquaworld/home/home.html

Mac OS X, donationware

Max Themes

http://homepage.mac.com/max_08

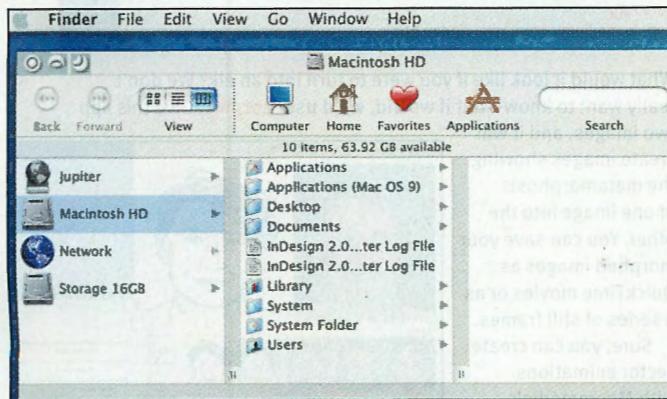
Mac OS X, donationware

Pillowtalk-Sky

<http://lonestar.utsa.edu/llee/res/themes.html>

Mac OS X

Once you've installed Duality, you can download and use a stunning variety of Mac OS X themes. We recommend the site **AquaWorld**, which offers subtle and classy themes—if you're into subtle and classy. For example, the Underling theme turns your close, minimize, and maximize buttons into suns and moons, and ClearAqua makes your menus and title bars transparent.



The Underling theme from AquaWorld makes subtle but pretty changes to your windows and menu bar.

Max Themes is another good themes site. The Mac OS 9 Platinum theme will take you back to the good ol' days when you were young and innocent, and the Windows XP theme will probably tick you off. Finally, **Pillowtalk-Sky** is a purplish, candylike theme that will appeal to the bubblegum set.

DESKTOP PICTURES

Press Plus

www.pressplus.com/content/wallpaper

Mac OS 9 and OS X

About This Particular Macintosh

www.atpm.com/5.11/desktop-pictures.shtml

Mac OS 9 and OS X

Digital Blasphemy

www.digitalblasphemy.com

Mac OS 9 and OS X

StarfishX

<http://homepage.mac.com/mscott/starfishx/starfishx.html>

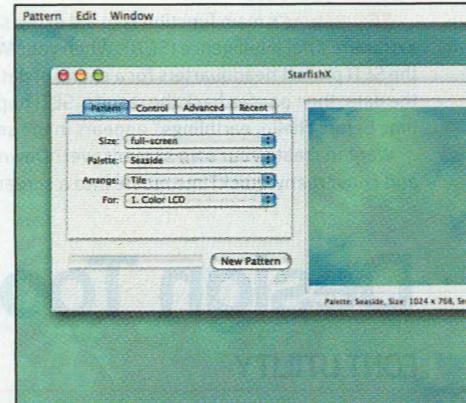
Mac OS X

Sometimes called *wallpaper* by folks on other platforms, desktop pictures are the ultimate way to make your Mac your own. Any image file that fits your screen's resolution will work as a desktop picture, but if you need help, the Web is there for you.

At **Press Plus** you can find stock photos of beaches, sunsets, and other natural surroundings, offered in resolutions of 1024 by 768 and 800 by 600 dpi. Similarly, at **About This Particular Macintosh**, you'll find 1024-by-768-dpi shots of the Bahamas, Niagara Falls, and other places you wish you were. **Digital Blasphemy** has images that verge on the phantasmagoric. Some images are free, and some require membership.

StarfishX

generates random desktop patterns based on parameters you set, such as screen size, color palette, and tiling style. It takes a few minutes to do its work, but when it's done it immediately applies the new pattern to your desktop. It also saves the pattern, should you want to switch back to it after using a different one.



StarfishX whips up its own desktop images based on parameters you set.

ICONS

The Icon Factory

www.iconfactory.com

Mac OS 9 and OS X

pic2icon

www.sugarcubesoftware.com

Mac OS X

When it comes to customizing your Mac, there's nothing like new icons. Just select a hard disk, folder, or file, then press Command-I, select the icon, and paste another icon right over it.

The Icon Factory has dozens of cool icons arranged on well-organized pages. Check out Xtra Drives, a set of Mac OS X hard-drive icons that'll deck out your disks in jaguar fur, cowhide, and other wacky textures (blame Apple for starting this animal-fur trend).

There are dozens of utilities to create your own icons, most of which cost at least a little money. But here's a tip: Create your own icon using Photoshop or another graphics tool, then convert it to an icon using **pic2icon**, which creates 128 by 128 Mac OS X icons from any image or folder of images.

► Customization continued...

SCREENSAVERS

| | |
|--|------------------------|
| Steve Dekorte's ScreenSavers www.dekorte.com/Software/OSX/ScreenSavers | Mac OS X |
| iX Screen Effects http://illumineX.com/software/index.html | Mac OS X |
| Fluid ScreenEffects www.concepthouse.com/products/Fluid | Mac OS X, donationware |
| SETI@home www.setiathome.ssl.berkeley.edu/download.html | Mac OS 9 and OS X |
| xbMovieMaker http://perso.club-internet.fr/bgaufier/downloads.html | Mac OS X |

No, you don't need a screensaver anymore; CRTs don't get *burned* by static images like they did when screensavers were first invented. But they're still fun.

One good place to find cool screensavers is **Steve Dekorte's** site. Our favorites include SkyFly, which shows a 3D landscape of grassy hills you can fly through with paper airplanes, and NeHe Particles, a shimmering, fairy-dust-like cloud of swirls.

Many of IllumineX's **iX Screen Effects** are geometric—reminiscent of screensavers of yesteryear—and include a (now retro) zooming-through-space screensaver that used to be all the rage. The iX Xirtam screensaver shows a Matrix-style shower of flickering green ASCII characters.

One awesome screensaver is **Fluid**, which slowly drowns your screen in liquid until it becomes a slowly undulating pool that's so mesmerizing you won't want to get back to work. See if that excuse flies with your boss.

SETI@home's main function is to aid in the search for extraterrestrial intelligence (SETI). When your Mac is idle, it contacts the SETI project headquarters for a chunk of data to crunch, processes the data, then passes back the results. SETI hopes it's only a matter of time before "hello, earthlings" appears in the sea of background noise.

Want to create your own screensaver? Download **xbMovieMaker**, and convert any QuickTime movie into a screensaver.

Design Tools

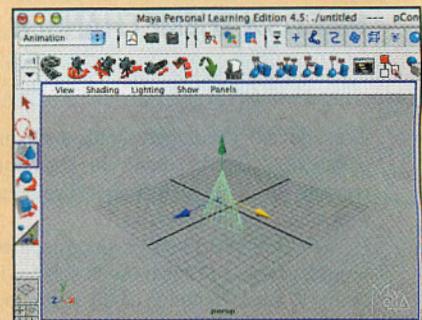
FONT UTILITY

| | |
|---|-------------------|
| Font Explorer http://pages.infinit.net/trottier/fexpl.html | Mac OS 9 and OS X |
| <p>Apple's Key Caps utility shows you a map of your keyboard and how the characters change when you press modifying keys—but to find out the key combinations for more-rare characters, you must resort to trial and error. Also, Key Caps can't tell you how to make the accent in <i>café</i>—very inconvenient if you run a French bistro.</p> <p>So use Font Explorer instead. In a single window, Font Explorer shows you all of a font's characters, including punctuation, accents, and special characters. Just click a character, and Font Explorer tells you the magic key combo that creates it—even those pesky accents.</p> | |

Font Explorer turns a font into a creative palette.

HIGH-END 3D APP

| | |
|--|-----------------|
| Maya Personal Learning Edition www.aliaswavefront.com | Mac OS X |
| <p>Maya is a 3D authoring tool with highly sophisticated animation skills. How sophisticated? You've probably seen a few of the movies in which this app has starred: <i>Spider-Man</i>, <i>Lord of the Rings</i>, and <i>Shrek</i>.</p> <p>Now here's the cool part: You can check out this \$1,999 tool for free! Just download the Personal Learning Edition, which includes extensive training materials. The Learning Edition really is just for learning, though; saved files show watermarks, and the file format isn't compatible with pro production software.</p> | TOP PICK |



Maya Learning Edition is 3D boot camp.

THUMBNAIL CREATOR

| | |
|---|----------|
| ThumbnailMaker www.dekorte.com/Software/OSX/ThumbnailMaker | Mac OS X |
|---|----------|

ThumbnailMaker couldn't be easier to use: Just drag images onto ThumbnailMaker's window and boom! Insta-thumbnail. You can also set options like width and height, of course.

POSTSCRIPT INTERPRETER

| | |
|--|-------------------|
| MacGSView www.cs.wisc.edu/~ghost/macos/index.htm | Mac OS 9 and OS X |
|--|-------------------|

Occasionally, even shareware powerhouse GraphicConverter (\$35, <http://lemkesoft.com>) needs a little help opening files, particularly PostScript files from Quark, Illustrator, or InDesign. **MacGSView** converts EPS and other PostScript files into the rasterized information that GraphicConverter—or any other app that isn't PostScript-savvy—can understand.

ANIMATION TOOLS

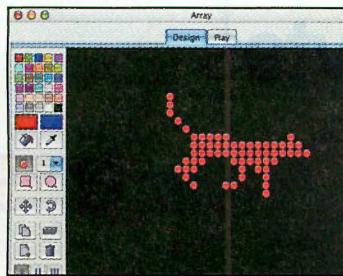
| | |
|---|----------|
| MorphX www.orcsoftware.com/~martin/Morph.html | Mac OS X |
| Cartoon Editor www.personal.utulsa.edu/~jeremy-wood/editor | Mac OS X |
| Array www.mediumk.com/array/index.html | Mac OS X |

What would it look like if you were to turn into an elk? We don't really want to know—but if we did, we'd use **MorphX**. Give this app two images, and it will create images showing the metamorphosis of one image into the other. You can save your morphed images as QuickTime movies or as a series of still frames.

Sure, you can create vector animations with Macromedia's Flash MX—but that's for pros (and rich



MorphX can turn a human into a line drawing in five quick steps.



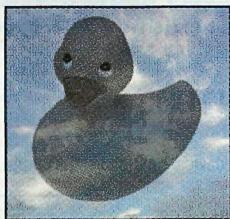
Array says it with Lite Brite. And nothing says classy like Lite Brite.

it—create a scrolling text effect or a movie marquee, for example. But please use this tool responsibly. We've seen a lot of bad Lite Brite images in our day.

PHOTOSHOP ADD-ONS

| | |
|--|-------------------|
| Flaming Pear Free Plugins www.flamingpear.com/download.html | Mac OS 9 and OS X |
| Splat demo www.alienskin.com | Mac OS 9 and OS X |
| Sue Chastain's Photoshop Actions http://graphicssoft.about.com/library/free/blfree_psactions1.htm | Mac OS 9 and OS X |

Plug-in filters add spice to Photoshop, but they often come at a price. Not the **Flaming Pear Free Plugins** pack. This baby offers cool, quirky effects like Ghost, which turns a layer into a monochrome, transparent object similar to colored glass.



Flaming Pear's Ghost plug-in can turn rubber duckies into ghost duckies.

with Splat, like using the Frame filter to create realistic frames and mattes, or adding decorative edge effects with the Edges filter.

Sue Chastain, card-carrying member of the National Association of Photoshop Professionals, has saved a few of her best moves as Actions, which the likes of you and me can download and run. Sue's Action Set provides some wacky 3D effects with type, while Sue's Cartoon Actions offer some inventive ways to turn photos into illustrations.

MACROMEDIA FIREWORKS ADD-ONS

| | | |
|--|-------------------|-------------------|
| Kaleidoscope | Color Glow | Mac OS 9 and OS X |
| www.macromedia.com/cfusion/exchange/index.cfm | | |



Kaleidoscope is a Fireworks add-on that puts swirling colors in motion.

people). For the dabblers—and cheapskates—there's **Cartoon Editor**. It's got a humble-but-serviceable set of drawing tools and gradient effects, and it can handle animation, which you can save in QuickTime format.

Array helps you create any type of animation you want—as long as you want it rendered as Lite Brite pegs. True, Lite Brite doesn't have the most photorealistic resolution, but there's a lot you can do with

it—create a scrolling text effect or a movie marquee, for example. But please use this tool responsibly. We've seen a lot of bad Lite Brite images in our day.

ONLINE 3D TEXT TOOL

| | |
|---|-------------------|
| Xara3D Sampler www.webpagedesign.com.au/heading.html | Mac OS 9 and OS X |
|---|-------------------|

If you're looking for a way to spruce up some boring ol' text, try turning it 3D. Just enter a word or phrase directly into the **Xara3D Sampler** Web site, and then choose fonts, colors, and styles to create a 3D version of your text. Xara3D Sampler will even create a .png file of your 3D text.



The Xara3D Sampler puts your message into 3D.

IMAGE FINDER

| | |
|--|----------|
| Pepper http://homepage.mac.com/petite_abeille/Pepper | Mac OS X |
|--|----------|

Drag any volume or folder into **Pepper**, and it searches through sub-folders, applications, and files, and digs out every (and we mean *every*) graphic—including images, icons, cursors, and tools. Click any image Pepper comes up with to get its file name, drag an image out of Pepper to copy it, or double-click to open it.

FONTS, BACKGROUNDS, AND BUTTONS

| | |
|---|-------------------|
| Free Mac Fonts www.freemacfonts.com | Mac OS 9 and OS X |
| Adobe Euro fonts www.adobe.com/type/eurofont.html | Mac OS 9 and OS X |
| AAA Buttons www.aaa-buttons.com | Mac OS 9 and OS X |
| AAA Backgrounds www.aaa-backgrounds.com | Mac OS 9 and OS X |
| Ambo Graphics www.ambographics.com | Mac OS 9 and OS X |

There are hundreds, nay, thousands of free fonts out there, but some font sites will bombard you with pop-up ads before you get near a single font, while others are Mac-unfriendly. Never fear. **Free Mac Fonts** shows you previews of Mac fonts on its very first page.

If you're using one of your old, old favorite fonts and you need to express a price in Euros, you may find that the font is Euroless. No problem—just download the free **Euro fonts** from Adobe. You'll get a serif, sans serif, monospaced, and bold Euro, all of which are neutral enough to blend in with most body fonts.

There's no paucity of free fonts, but there's even less of a shortage of free art on the Web—and most of it will make you wince. There are a few sites, however, that offer slick images, particularly for Web designers. At **AAA Buttons**, for example, you'll find a whole lotta buttons, many created with Aqua in mind. At **AAA Backgrounds**, you'll find cool abstract designs, simple textures, and faux effects, such as cloth. **Ambo Graphics** also has a great selection of artistic backgrounds, buttons, and bars.



You can download any of these backgrounds from Ambo Graphics for free—provided you use them on personal Web sites.

iStuff for iApps

iMOVIE PLUG-IN

TOP PICK

Slick Sampler
www.geethree.com
Mac OS 9
and OS X

iMovie 3 comes with a variety of effects, but Gee Three's **Slick Sampler** adds even more transitions and filters to Apple's DV-editing app. Transitions include the ubiquitous Barn Door (creates the effect of an opening-and-closing door), Drip (which looks like dripping paint), and four others.

Slick Sampler includes three filters. The Film Noise filter takes your clean, smooth DV footage and makes it look as though it were captured using an old 8mm camera—and it's more convincing than iMovie's Aged Film effect. Solarize blasts your clip with extra light. X-Ray doesn't show you the bones inside of your subjects, but it does turn clips into a spooky negative monochrome.



Slick Sampler's Burst transition puts more oomph in your iMovies.

iTUNES PLUG-INS

Vortex
www.trinifinitysoftware.com/vortex.shtml

Mac OS X

Fielder
www.apple.com/downloads/macosx/audio/fielderitunesplugin.html

Mac OS X



Vortex gives iTunes alternative swirls.

The iTunes Visualizer does an excellent job at interpreting your music, but sometimes you want something a little different. **Vortex** is a little more geometric, a little more stately, and a lot more subtle, using circles that change in color, size, and position. **Fielder** will appeal to your analytical side, displaying a row of lines that represent your audio's tonal range. The length of each line represents the amplitude.

iCAL CALENDARS

Movie Calendar
www.apple.com/ical/library

Mac OS X

American Politics and Government Calendar
www.icalworld.com/gov.html

Mac OS X

It's hard to keep track of everything in this crazy world; shared iCal calendars can lend a hand. One of our favorites is the **Movies** calendar, which advises you of upcoming movie release dates. You might also want to raise your civic awareness by subscribing to the **American Politics and Government** calendar, which will help you keep your finger on the pulse of congressional happenings, as well as remind you when it's time to vote. You do vote, don't you?

Sound Bytes

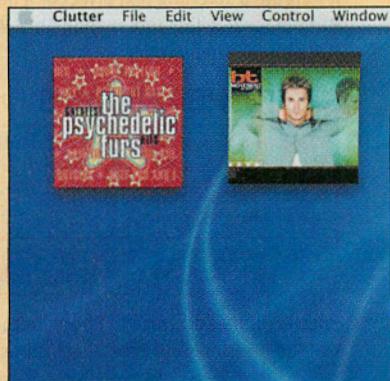
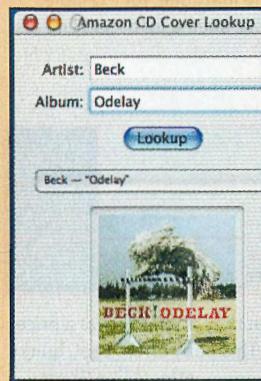
MP3 CUSTOMIZATION TOOL

TOP PICK

Clutter
www.sprote.com/clutter

Mac OS X

The extraordinarily cool **Clutter** looks up any CD from Amazon, finds the cover image, and makes an icon from that image that you can stick on your desktop. When you double-click these icons, they play the CD using iTunes (provided that album's in your iTunes library or the CD is in the drive).



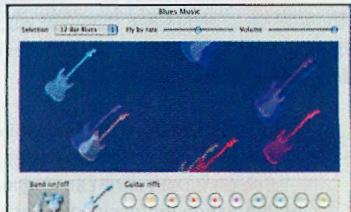
Look up any album in Clutter (left) to clutter up your desktop.

MUSIC CREATION TOOL

Blues Music
<http://homepage.mac.com/davidahmed/bluesMusic.html>

Mac OS X

There's no need for talent when you have **Blues Music**. Just choose one of three backgrounds (12 Bar Blues, Shuffle, or Rock the Blues), and you'll hear the bass and drums. Then it's up to you to press the guitar-riff buttons to produce a flawless—albeit cliché-ridden—solo to soar above the other instruments.



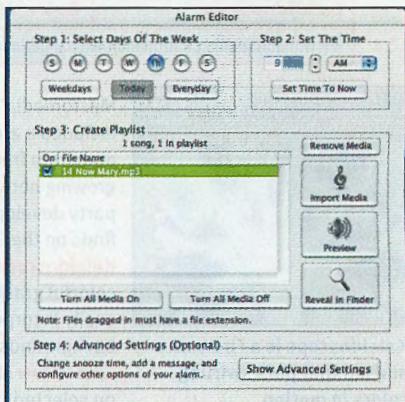
Blues Music helps you tell it like it is, blues-style.

WAKER-UPPER

mp3 alarm clock
www.sugarcubesoftware.com

Mac OS X

Why wake up to crappy talk radio when you've got a Mac full of MP3s? Use **mp3 alarm clock** to set as many alarms as you want, using as many MP3s as you want. You can schedule different alarms for each day and there's even a snooze option for those of you who sleep next to your Mac.



SOUND-FILE CONVERTER

SoundConverter

www.dekorte.com/downloads.html

Mac OS X

This simple app converts sound files to and from a good selection of formats, including WAV, AIFF, and SND. **SoundConverter** sports a single window with a single menu that allows you to choose the file type you want to convert to. Simple. Effective.

LIVE365 STREAMS

Hawaiian Rainbow

www.hawaiianrainbow.com

Mac OS 9 and OS X

Dubstream

www.dublab.com/help.asp?bhcpc=1

Mac OS 9 and OS X

Attention Span Radio

www.attentionspanradio.net

Mac OS 9 and OS X

Live365 is an Internet radio hub that expands your listening universe way beyond iTunes radio stations. Simply sign up for a Live365 account (www.live365.com), and you can play any of its stations from within iTunes. Here are a few stations that got our toes tapping.

Hawaiian Rainbow brings you the lovely, lilting sound of the islands, ranging from stirring instrumentals to downright kitschy ballads. Too mellow? Try the glitzy, upbeat, ever-peppy sounds of dub. With **Dubstream**, you can create a club ambiance around your Mac instantly.

Attention Span Radio is your source for rollicking instrumental fusion. You can hear plenty of synth, crashing cymbals, elaborate melodies, bass solos, and wanton experimentation. You can even catch the occasional live recording mixed in with the studio sounds.

Video F/X

QUICKTIME UTILITY

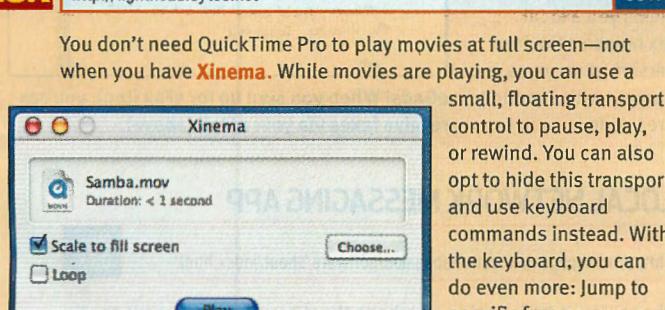
Xinema

<http://lighthead.sytes.net>

Mac OS X

You don't need QuickTime Pro to play movies at full screen—not when you have **Xinema**. While movies are playing, you can use a small, floating transport control to pause, play, or rewind. You can also opt to hide this transport and use keyboard commands instead. With the keyboard, you can do even more: Jump to specific frames, move forward or backward frame by frame, or adjust the volume.

TOP PICK



Using this simple app, you can get your QuickTime movies playing at full screen.

DISK SPACE CALCULATOR

VideoCalc

www.ifthensoft.com

Mac OS X, donationware

If you know how many seconds of digital video you can store in a gigabyte of disk space, you're smarter than we are. **VideoCalc** takes care of the hard math—just enter the particulars about the size of your hard drive, and VideoCalc will figure out how much footage you can bring in.

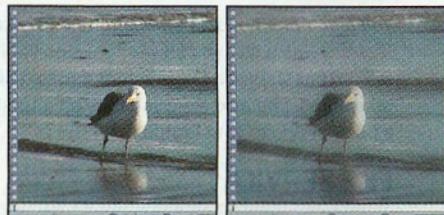
FINAL CUT PLUG-IN

Silk and Fog

www.chv-plugins.com

Mac OS 9 and OS X

Silk and Fog are subtle effects that essentially cast a silky, blurry shroud over your selected clip. They offer no parameters—you get what you get—but they might fit the bill for that special shot.



Silk and Fog create a dreamy haze over your clips.

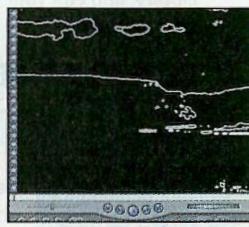
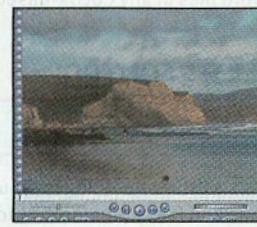
FINAL CUT/AFTER EFFECTS FILTER

Cartooner

www.borisfx.com/download/cartooner_landing.php

Mac OS 9 and OS X

Cartooner is a wild filter that traces the basic contours of your scene using a thick bright line. The result is a scene that looks hand-animated.



Cartooner provides an interesting hand-drawn effect.

Office Gadgets

PERSONAL INFORMATION MANAGER

Palm Desktop

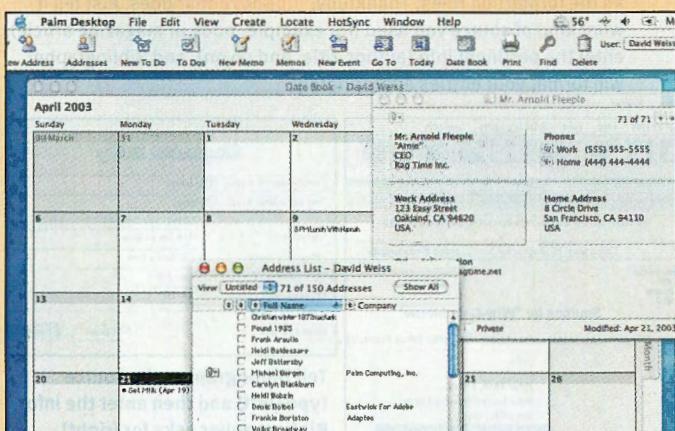
www.palm.com

Mac OS 9 and OS X

TOP PICK

No, you don't need a Palm handheld to use **Palm Desktop**, the venerable PIM that Palm ported eons ago from Claris Organizer. Although Palm Desktop is free, it's no wimpy little utility. It's a calendar, a to-do manager, and a contact database rolled into one.

Palm Desktop lets you sort using your own categories, so you can choose to view, say, only your co-workers or your weekend buddies. You can also quickly look up contacts from the Dock, and like any good life-organizer, you can set alarms for those pesky events you wish you could forget about (call dentist, pay taxes, attend mother-in-law's Tupperware party).



Palm Desktop is a PIM that means business.

► Office Gadgets continued...

DOCUMENT-READING UTILITY

Palm Reader

www.palmdigitalmedia.com

Mac OS 9
and OS X

You also don't need a Palm handheld to take advantage of **Palm Reader**, which lets you view eBooks on your Mac (sorry—it doesn't tell fortunes). Pick a favorite font and text size, add bookmarks, and take notes. The next time you take an interstate bus ride, download a book or two to your laptop first.

FILE SERVICE

AntiWordService

www.devon-technologies.com/freeware.html

Mac
OS X

Are you mad at Microsoft Word? So mad that you're just not going to take it anymore? If you don't feel like shouting out your window, here's another way to protest: Install **AntiWordService** in your Library, and edit your Word files in any Cocoa-based text editor, such as TextEdit.

BLUETOOTH REMOTE CONTROL

Romeo

www.irowan.com/arboreal

Mac
OS X



Control your Mac with
your Bluetooth phone.

Here's a little something for your fancy Bluetooth phone and fancy Bluetooth Mac. **Romeo** lets you control your Mac with your phone. You can move the cursor and broadcast clicks (among other maneuvers)—perfect for advancing Keynote slides with your phone while leaving one hand free for wild gesticulations.

DATABASE APP

Little Office

www.timbri-online.com/LittleOffice

Mac OS X,
donationware

If you have a small business, and you want a simple way to keep tabs on your inventory, **Little Office** is a humble alternative to throwing time and money into more-involved apps such as FileMaker Pro or MySQL—just use its templates to keep track of orders, customers, sales, and other such lucrative activities.

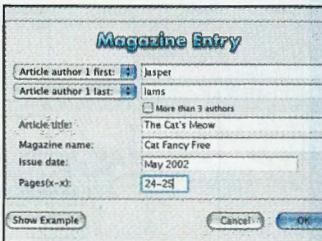
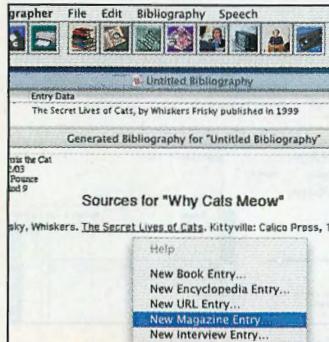
BIBLIOGRAPHY FORMATTER

Bibliographer

www.stanford.edu/~tristanh

Mac OS 9
and OS X

You're trying to pull together a bibliography, and you don't remember all the formatting rules. Thankfully, **Bibliographer** does. Just tell it what kind of source you used (for example, book or magazine article), enter the pertinent info (author, title, and so on), and Bibliographer will format your entries appropriately.



Tell Bibliographer the source
type (left) and then enter the info
Bibliographer asks for (right).

CONTACT MANAGER

Sbook

www.sbook5.com

Mac
OS X

Sbook is a simple, small contact application. Its main strength is its search function, which can quickly find any and all information in any field of any record in its database. For example, if you don't remember the name of that guy from Apple you met, just type in *Apple*, and *Steve Jobs* will pop to the top.

Communication

WEB-BASED FAX SERVICE

eFax

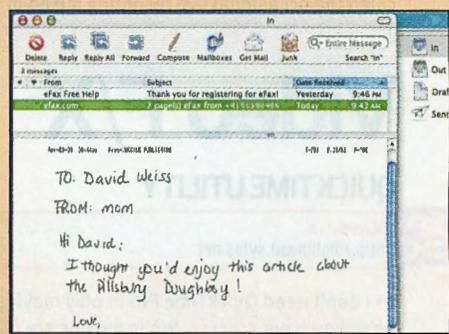
www.efax.com

Mac OS 9
and OS X

**TOP
PICK**



You don't have to run down to Kinko's every time someone sends you a fax—unless, of course, you like hanging out at Kinko's. All you need to do is sign up for a free account with **eFax**, give out the fax number bestowed upon you, and faxes will arrive as TIFF files in your email in-box. You can't *send* faxes with the free version though—for that, you need **eFax Plus**, which costs \$9.95 a month. Signing up for **eFax Plus** also yields you a local fax number; the free version gives you a fax number with a random area code.



eGads! When you sign up for **eFax** (top), you can receive faxes via your eMail (above).

LOCAL NETWORK MESSAGING APP

Shout

<http://homepage.mac.com/nebagakid/software/shout/index.html>

Mac
OS X

Phone, fax, email, paging...perhaps there aren't enough ways to bug people these days. Well, thanks to **Shout**, a Rendezvous-based messenger, there's one more. Run the server app on your Mac, and send messages to anyone on your local network. To see the **Shout** server's message, just run the client and subscribe to the service.

WEB MAIL

MyMacMail

www.mymacmail.com

Mac OS 9
and OS X

TheCrazyOnes

www.thecrazyones.com

Mac OS 9
and OS X

Yes, it's a crying shame that Mac.com email addresses are no longer free. Luckily, you can still get the *Mac* back into your email address. **MyMacMail** will assign you a *yourname@mymacmail.com* address,

along with 10MB of mail storage space. Yes, you're gonna get a few ads here and there as you check your email, but the service keeps it to a minimum. For those with a bit more Mac fervor—"the misfits, the rebels, the troublemakers"—you can get a thecrazyones.com email address. **TheCrazyOnes** service will also give you 6MB of storage.

SCREEN-SPYING UTILITY

Spy

www.silvernetwork.net

Mac OS 9 and OS X, donationware

If you want to show someone what's on your screen, you could email them a screenshot—better yet, you could use **Spy**. All you do is launch the Spy Server, press Start, and you'll be assigned an IP Address. Send someone that address and they can see your screen via a Web browser.

Utilities

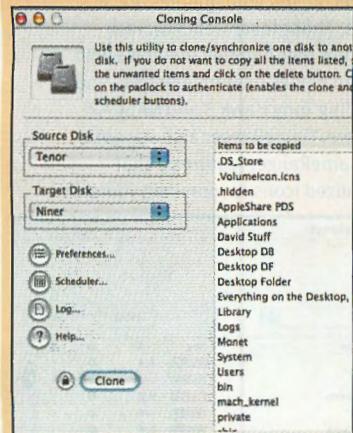
SYSTEM COPYING UTILITY

TOP PICK

Carbon Copy Cloner

www.bombich.com/software/ccc.html

Mac OS X, donationware



Carbon Copy Cloner creates a bootable copy of your system in a jiffy.

Before Mac OS X came around, moving to another Mac meant just transferring a few crucial system folders and your data. Nowadays it's a royal pain: Many crucial files are invisible, making it impossible to find everything you need to move.

Enter **Carbon Copy Cloner**. This sweet little app creates a bootable copy of your system (you can also use it to make regular ol' non-bootable backups). It has a clean, simple interface—all you do is choose the source and target disks. You can also tell Carbon Copy Cloner what to ignore, such as files you've already backed up.

SYSTEM TWEAKER

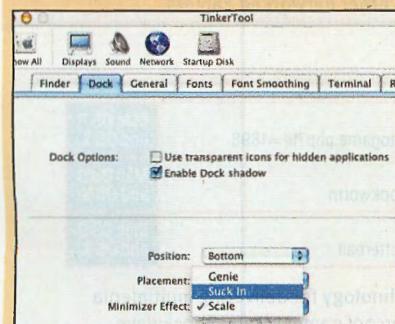
TOP PICK

TinkerTool

www.bresink.de/osx/TinkerTool2.html

Mac OS X

For those of you who don't want to get your hands dirty hacking Mac OS X, **TinkerTool** is a great catch-all system-preference app for making all sorts of miscellaneous OS X system adjustments.



TinkerTool is a great catch-all utility.

With TinkerTool, you can opt not to show the rectangle effect (a series of animated black rectangles that appear when you open a file), add Quit to the Finder menu, and turn on a shadow around the Dock, among other things. You can also change the system font, move the Dock to the top of the screen, and choose the Suck In window-minimizing effect (a variation of the Genie effect).

QUARTZ EXTREME UTILITIES

Quartz Extreme Check

www.entropy.ch/software/macosx/#quartzextremecheck

Mac OS X

PCI Extreme

<http://pages.cthome.net/zacks>

Mac OS X

If you've upgraded to Jaguar, its Quartz Extreme graphics acceleration feature may or may not be running. To find out, you could check Apple's site to see if your graphics card supports Quartz Extreme, but the easiest way is to run **Quartz Extreme Check**, which will just flat-out tell you if Quartz Extreme has kicked in or not.

According to Apple, Quartz Extreme only runs when you have an AGP graphics card. But why listen to Apple? (We don't, as evidenced by our PowerBook autopsy, p39.) **PCI Extreme** will force a Mac with a PCI Radeon card to use Quartz Extreme.

PASSWORD-MANAGEMENT APP

CiphSafe

www.withay.com/macosx/ciphsafe.html

Mac OS X

Another day, another password and user name. **CiphSafe** is a vault for all your secret account information and other stuff you don't want to write down—and it's much easier to use than Apple's Keychain. It can also generate passwords for you, using good cypherpunk sense.



CiphSafe restores password sanity—although you still have to remember the password to launch CiphSafe.

ENCRYPTION SOFTWARE

PGP Freeware

www.pgp.com/products/freeware.html

Mac OS X

You've heard it before, but we'll say it again: Dedicated hackers can intercept and read any Web form, email, or other online missive. And though no encryption scheme is perfect, you can achieve close-to-unbreakable email privacy via the free software provided by **PGP** (Pretty Good Privacy). Just encrypt a message and create an unlocking code for your recipient; just don't distribute this code along with your top secret email. But you knew that. We hope.

FILE LAUNCHERS

Locator

www.sebastian-krauss.de/software

Mac OS X

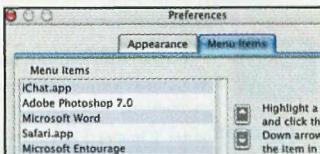
Rocket Launcher

http://homepage.mac.com/type_r503/kel9000.html

Mac OS X

Finding files using Jaguar's built-in search is relatively quick, but the Unix locate command is even quicker. **Locator** puts an Aqua face on this command, which makes it easy to use as well as fast. It needs a little time to build a database every so often, though—so cut it some slack.

If you miss the ol' application menu from pre-OS X days, **Rocket Launcher** can help. It puts an app-launching menu in your menu bar, even letting you pick the apps you want to appear there. G'bye, Dock!



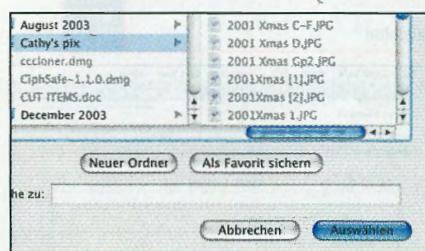
Select the apps you want to access from your menu bar (above), and Rocket Launcher will put them there (right).



► Utilities continued...

WEB-BASED STORAGE**Yahoo Briefcase**<http://briefcase.yahoo.com>Mac OS 9
and OS X

Quite a few sites offer Internet storage, but our favorite is **Yahoo Briefcase**. You can store up to 30MB in your Briefcase, and it's both fast and reliable.

FINDER UTILITY**Tree Size**www.monkeybreadsoftware.de/FreewareMac OS 9 and OS X,
donationware

Even though you have to navigate folders in German (left), the results Tree Size gives you are crystal-clear (below).

| Cathy's pix | | | |
|---------------|------------|------------------|-------|
| Name | Größe | Folders | Files |
| ▼ Cathy's pix | 13693.5 KB | 1 | 118 |
| ► Palm Photos | 4224.7 KB | 2 | 94 |
| Total | | | |
| Data | | Ressource | |

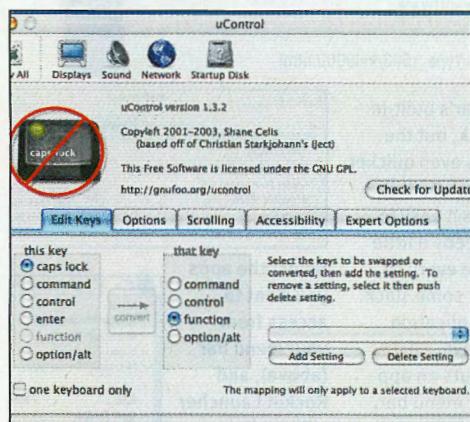
APP-OPENING APPLESCRIPT**Wipe Creator**www.scotlandsoftware.com/products/applescript/index.html

Mac OS X

It's frustrating when the wrong application opens a file. **Wipe Creator** ensures that files open in the appropriate default Mac OS X application. For example, drop a JPEG created in GraphicConverter onto this AppleScript and your image will open in Preview.

KEYBOARD LAYOUT CONFIGURATOR**uControl**<http://gnufoo.org/ucontrol/ucontrol.html>

Mac OS X

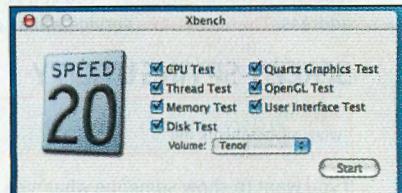


Remap your keys with **uControl**.

Some folks just aren't satisfied with anything—even their keyboard layouts. If you're one of 'em, take **uControl** for a spin. This system preference app can turn Control keys into Command keys, give your laptop's trackpad scroll-wheel capabilities, and accomplish other slick maneuvers of this kind.

BENCHMARKING TOOL**Xbench**<http://xbench.com>Mac OS X,
donationware

Xbench will measure CPU, RAM, hard disk, and other aspects of your Mac's performance. If you're curious how your Mac stacks up against the other zealous overclockers out there, you can compare your results to postings on the Xbench Web site.

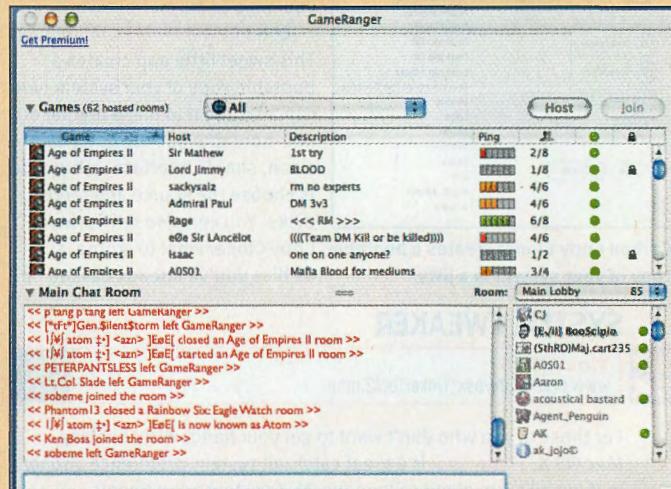


Xbench clocks your Mac so you can back up your speed claims.

Games**MULTIPLAYER ONLINE GAMING SERVICE****GameRanger**www.gameranger.comMac OS 9
and OS X**TOP PICK**

You've got a hankering to play Ghost Recon, but your buddies are all out on dates or schmoozing at job fairs. Those losers! Luckily, with **GameRanger** you can find a bunch of new Mac buddies to rumble with.

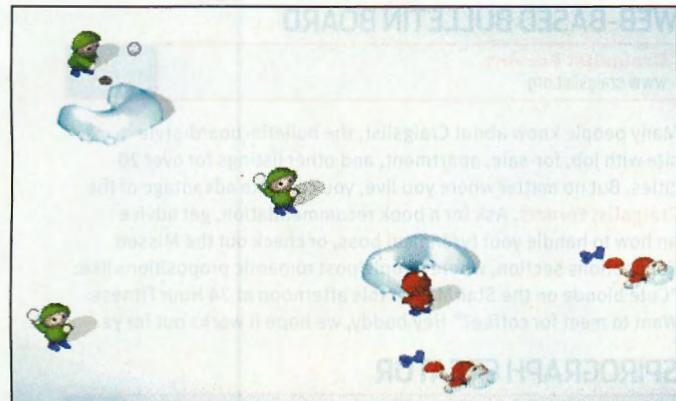
GameRanger lets you join networked games or start your own, and it supports many newer games, including Tony Hawk 3 and NASCAR Racing 2002. For the less-than-hardcore, **GameRanger** also supports games like Scrabble and Monopoly. **GameRanger** features a chat window and the ability to use personalized icons to represent yourself.



GameRanger hooks you up with other networked gamers.

SHOCKWAVE GAMES**Snow Craft**www.arcadepod.com/shockwave/gotogame.php?id=1898Mac OS 9
and OS X**Bookworm**www.shockwave.com/sw/content/bookwormMac OS 9
and OS X**Gutterball 3D**www.shockwave.com/sw/content/gutterballMac OS 9
and OS X

Shockwave is Macromedia's technology for delivering multimedia content over the Web—aka supercool games! Many Shockwave games are available for download (usually for a fee), but you can



We killed Kenny! Snowballs become lethal weapons in **Snow Craft**.

play most of the same games online for free. Just be sure you've got the Shockwave plug-in installed (www.macromedia.com/software/shockwaveplayer).

In **Snow Craft**, two teams of kids who look like they stepped right out of *South Park* battle it out with snowballs. Your goal: to

knock the other team senseless before they do the same to you. It's a bit slow, even with broadband, but fun.

Bookworm is an entertaining diversion for word nerds. You try to spell words by connecting tiles—the longer the word, the higher the score.

Gutterball is (surprise, surprise) a bowling game, and it effectively captures the aspect of the

game where you fan the air in the hopes of directing the path of your ball. Just move your mouse to slowly affect the ball's trajectory. It's also worth checking out Gutterball just for the good old-school funk background music.

FREEWARE GAMES

3DBlur

<http://home.fuse.net/obvious>

Mac OS X

Asteroid Storm

www.zarkonnen.com

Mac OS 9 and OS X



Fly through a canyon in **3DBlur**—and try not to hit anything, would ya?

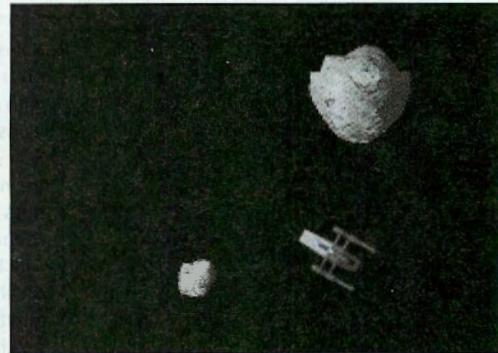
3DBlur is a flight sim—but in this case, *sim* is short for simple. You fly through a naturalistic maze of mountains and try not to crash—but there's nothing realistic about your aircraft. It has one gauge, which shows your approximate position, and a single means of control: either your mouse or the arrow keys. Still, **3DBlur** is addictive—the farther you

get through the terrain, the higher your score.

In **Asteroid Storm**, you're on a space ship surrounded by asteroids.

Sound familiar? **Asteroid Storm** is an homage to *Asteroids*, which addicted a generation of arcade-goers, and it doesn't disappoint.

The graphics and sounds are impressive, and the explosions are rendered in convincing detail.



Asteroids, anyone? Blast through rocks in this classic space game.

Web Paraphernalia

ONLINE BLOG CREATOR

Blogger

www.blogger.com

Mac OS 9 and OS X

TOP PICK

Dave Barry's Blog

<http://davebarry.blogspot.com/>

Tuesday, April 29

OUR STANDARDS (CONT.)

It will be a cold day in hell before this blog links to such a c... and vicious site as [this one](#).

(Thanks to Claire Martin posted by Dave 12:31 PM)

OUR APOLOGIES

What with Iraq and SARS and whatever, we overlooked the important and ongoing story of [Yolanda the weight-pulling poodle](#). posted by Dave 10:03 AM

SQUIRREL UPDATE

[Rampage in Germany](#). posted by Dave 9:55 AM

Monday, April 28

REALLY BIG CHICKEN EGGS IN THE NEWS

[No wonder they call this town "Butley."](#) posted by Dave 4:49 PM

TALK ABOUT YOUR TAINTED EVIDENCE

Here's a [good example](#) of why police officers are underpaid

Blogger must be good—Dave Barry uses it.

WEB-HOSTING SERVICE

Mac Rules

www.macrules.com

Mac OS 9 and OS X

If you're looking for a place to host your Web site, check out **Mac Rules**, where you can pick up 10MB of server space. To qualify for free hosting, however, you have to offer Mac-oriented content. If you ever wanted to post your own product reviews, rave about the latest gadgets, or rag on Apple's management, this could be the digital soapbox for you.

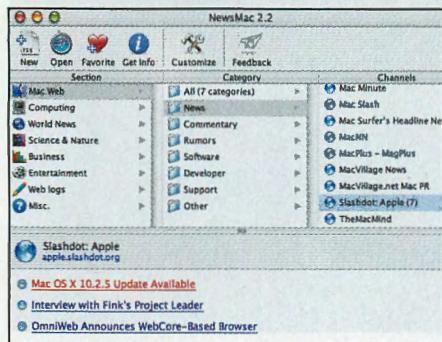
► Web Paraphernalia continued...

BROWSING UTILITY

NewsMac

<http://users.aber.ac.uk/rp9/newsmac/downloads.html>

Mac OS X, donationware



News Web sites can be pretty distracting, what with all the blinking icons and banner ads. **NewsMac** retrieves the news for you and puts it into a clean, friendly interface. And because it only displays headlines and text, NewsMac is much faster than any browser, and works well even over dial-up.

NewsMac delivers just the facts.

WEB-DEVELOPMENT TOOLS

MySQL

www.mysql.com/downloads/mysql-4.0.html

Mac OS X

Dragon Web Surveys trial

<http://wmotion.com/dragon.html>

Mac OS 9 and OS X

Say you run a club for Mac fanatics. You don't want to list all the members of your club on a static Web page. Instead, you want your members to be able to search for other members based on a few criteria. What you need is **MySQL**, an ongoing, open-source database that can help your Web site handle dynamic content.

If you want to create a survey that tests potential members to ensure that they're fanatical enough for your club, check out the **Dragon Web Surveys** trial, which (in conjunction with FileMaker Pro) lets you create a Web survey that can receive up to 50 responses.

None of the Above

EGO-BOOSTING WEB SITE

TOP PICK

usoFyne

www.usofyne.com

Mac OS 9 and OS X



usoFyne tells you the whole truth and nothing but.

If you're feeling down, go fishing for a compliment with **usoFyne**. Just fill out a Web form with some basic information about yourself, and a real person emails you back a usoFyne—a thoughtful (and ever-so-slightly risqué) barrage of compliments.

Be patient! It took about two weeks for us to get a response, but it was well

worth the wait. Here's what usoFyne had to say to someone who was recently laid off: "What is up with that? Getting laid off—you, of all people! You who are so hot and awesome and an important part of the company....Despite your current problems, your amazing awesomeness is full-time, forever..." We've never loved ourselves as much as we do now.

WEB-BASED BULLETIN BOARD

Craigslist Forums

www.craigslist.org

Mac OS 9 and OS X

Many people know about Craigslist, the bulletin-board-style site with job, for-sale, apartment, and other listings for over 20 cities. But no matter where you live, you can take advantage of the **Craigslist Forums**. Ask for a book recommendation, get advice on how to handle your tyrannical boss, or check out the Missed Connections section, where people post romantic propositions like: "Cute blonde on the StairMaster this afternoon at 24 Hour Fitness: Want to meet for coffee?" Hey buddy, we hope it works out for ya.

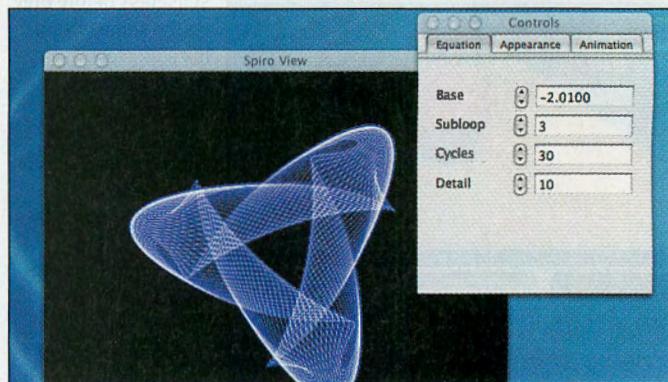
SPIROGRAPH CREATOR

SpirographX

<http://homepage.mac.com/solidmag/spiro>

Mac OS X

Remember that spirograph-drawing gear set you had as a kid? Here's a digital version—only now you don't have to worry about keeping your pen in the hole. Just play with different settings like color and equation, and **SpirographX** will dutifully draw a spirograph image (or animation, if you wish). You can even turn your animation into a screensaver.



SpirographX nurtures your inner kindergartner.

EARTH AND SPACE

WeatherPop

www.glu.com/products/weatherpop/index.html

Mac OS X

MoonDock

<http://homepage.mac.com/garycmartin>

Mac OS X, donationware

Our Neighbors

<http://homepages.tig.com.au/~cthulhu/sbc/index.html>

Mac OS X

WeatherPop shows the current temperature and a weather icon (indicating sunny, partly cloudy, and so on) right in your menu bar. The free version only includes U.S. cities covered by the National Weather Service. **MoonDock** sits where you'd expect and gives you a run-down of the moon's phase, estimated surface visibility, and other lunar info. **Our Neighbors** shows a 3D representation of our sun and its 70 nearest neighboring stars, showing their names and other information. You can rotate the model in all directions, changing your view of the stars in relation to the sun.



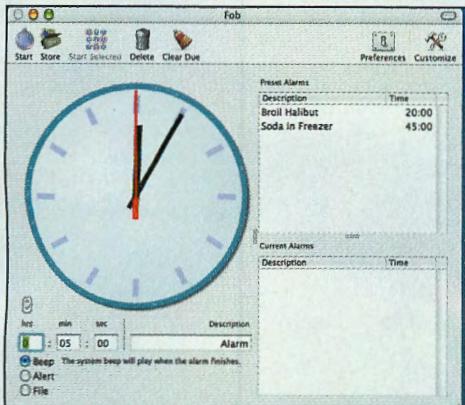
Keep tabs on the outside world with **WeatherPop**.

KITCHEN TIMERS

Fob<http://homepage.mac.com/tfinley/LeakyPuppy/fob.html>**Cuppa**www.wunderbear.com/cuppa

Mac OS X

Mac OS X



Fob will tell you when to check on your culinary creations.

Have you ever been so involved in getting that drop shadow just right in Photoshop that you accidentally burn your dinner roast beyond recognition? You need **Fob**. **Fob** is a kitchen timer for your Mac that counts down a set amount of time, then chimes when it's time to deal with the meat. **Cuppa** is more specific: It knows how long to steep

various types of tea. A teacup icon bounces in your Dock, complete with a spoon-clank sound, when your tea is ready to sip.

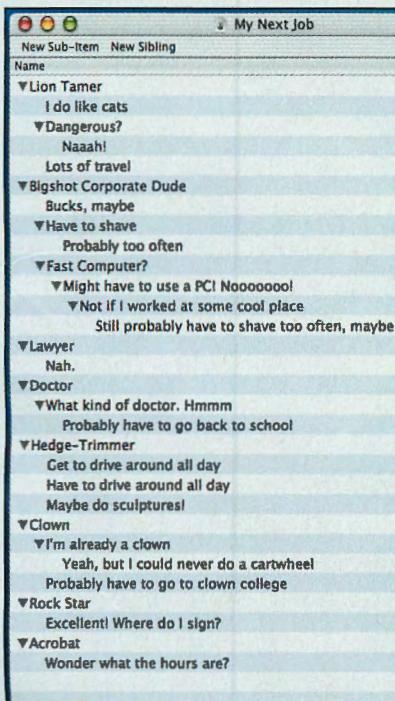
BRAINSTORMING TOOLS

Idea Knotwww.StayAtPlay.com/ideaknot

Mac OS X

MyMindwww.sebastian-krauss.de/software

Mac OS X, donationware



You know you're a genius, but to convince others of that, your ideas need to be well organized. **Idea Knot** is a simple app that helps you sort your thoughts into categories. **MyMind** is another brilliance-structuring tool that lets you outline your ideas, projects, and so on, and then export them into a graphical flowchart that you can use in apps such as Keynote.

Type out your thoughts in **MyMind** (left), and it will produce a graphical representation of that mumbo jumbo (below).



CIRCUS-CAREER STARTER

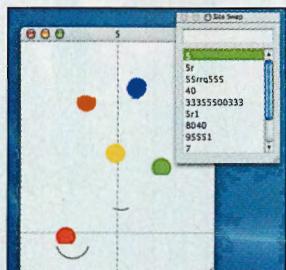
Juggle<http://home.earthlink.net/~ocb1/mac.html>

Mac OS X

So you want to learn how to juggle.

Juggle shows very simple, clear animations of complex juggling patterns. Even if you can't immediately replicate them using flaming torches or chain saws, at least you can get an idea of what you need to work on.

Juggle preps you for your next job interview.



WEB-BASED ALARM

Birthday Alarmwww.birthdayalarm.com

Mac OS 9 and OS X

If you're always forgetting your mom's birthday, the **Birthday Alarm** Web site can help get you out of hot water. Sign up, and it gives you a link that you can email to those special somebodies so they can fill in their vital info. Once their information is in the system, you'll get an auto-reminder a week before the big day.

DESKTOP CLOCK

Fuzzy Clockwww.objectpark.org/FuzzyClock.html

Mac OS X

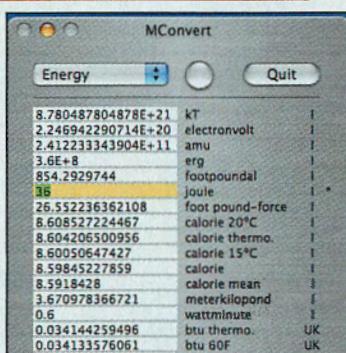
The problem with most digital clocks is that they're so...accurate. A time of 11:56 doesn't carry nearly as much meaning as 'round midnight. **Fuzzy Clock** addresses this problem by using terms such as *nearly*, *almost*, and so on, to express the time. It can also tell you the date, although that info is given precisely—you'll see June 15 rather than "mid-June."

CONVERSION UTILITY

MConvertwww.icp.com.na

Mac OS X

How many tablespoons in a liter? Who knows? Who cares? Luckily, **MConvert** does. In fact, it also knows picas, leagues, calibers, bushels, pecks, and then some. Oh, the answer's 67.6.



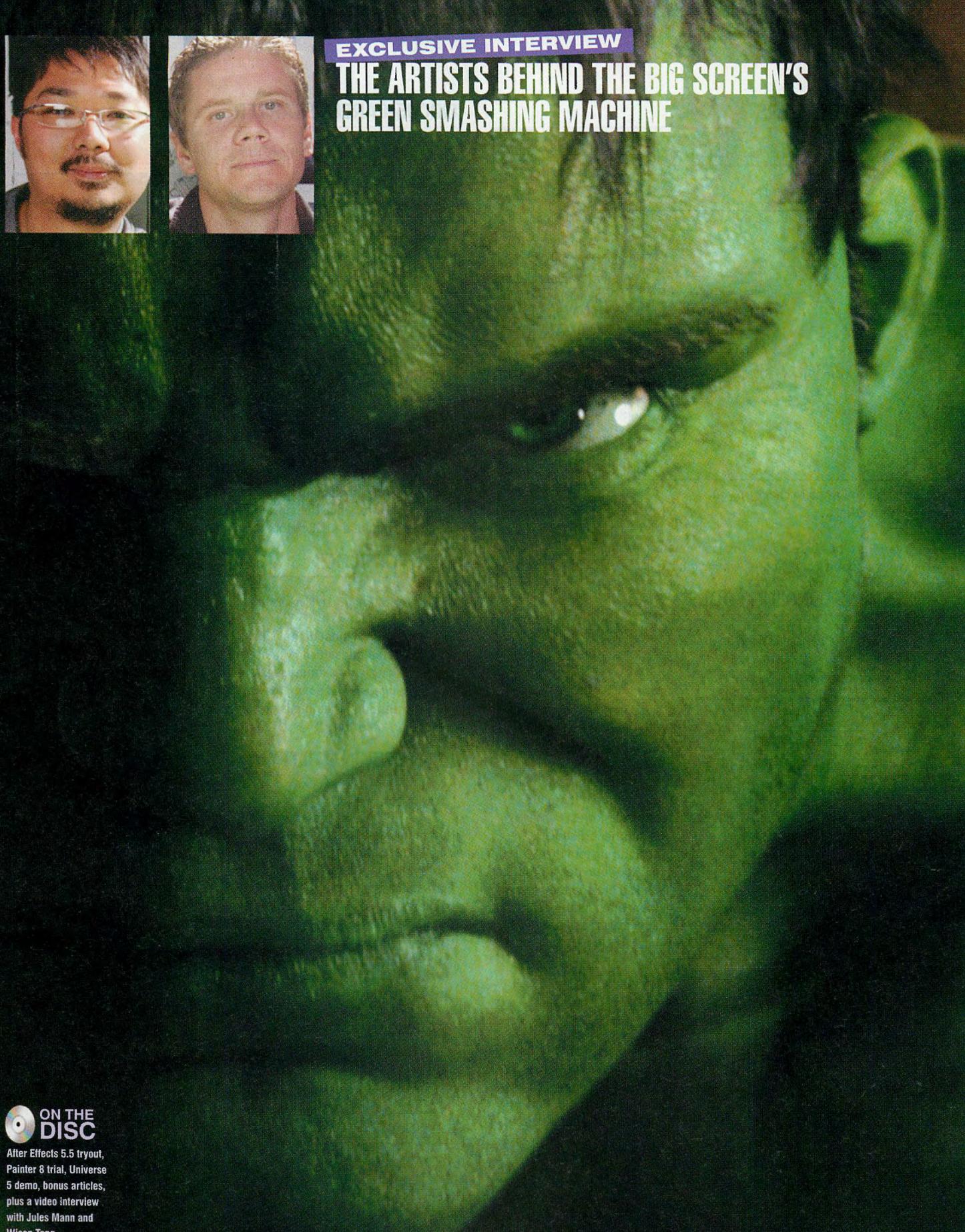
MConvert knows a hell of a lot about measurements.

David Weiss is a technology writer based in Oakland, California, and has worked at a number of Mac publications. He's downloaded so many free things from the Web that he dreams in RGB.



EXCLUSIVE INTERVIEW

THE ARTISTS BEHIND THE BIG SCREEN'S GREEN SMASHING MACHINE



ON THE DISC

After Effects 5.5 tryout,
Painter 8 trial, Universe
5 demo, bonus articles,
plus a video interview
with Jules Mann and
Wilson Tang

by Kris Fong

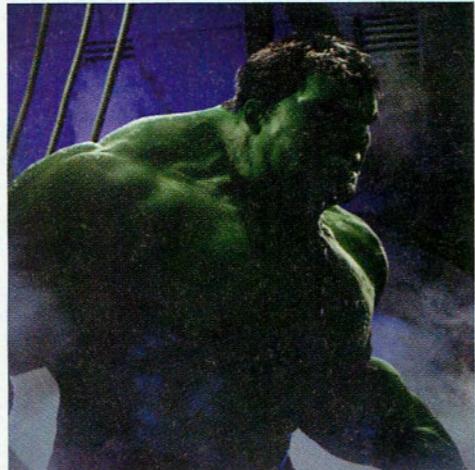
The Hulk

We reveal the secret design weapon that propelled the Hulk from sketch to silver screen.

As a famous frog once said, it's not easy being green. It's also not easy being the guys who had to choose the perfect shade of green to cover literally one of the biggest Marvel Comics superheroes to come to the big screen. But that was exactly the challenge facing art directors Jules Mann and Wilson Tang at Lucas Digital's Industrial Light + Magic (ILM).

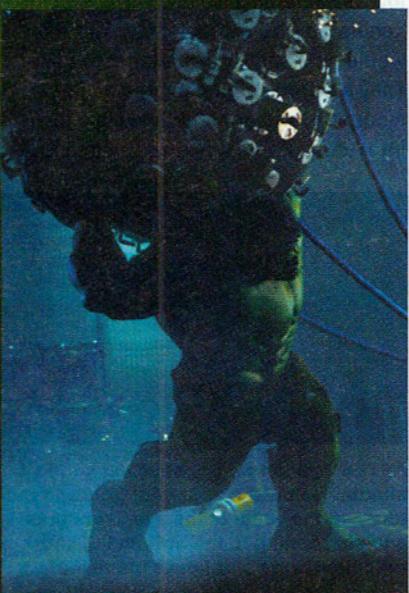
Of course, the hero we're talking about is the Hulk, and the movie is this summer's much-anticipated *The Hulk*, directed by Ang Lee and starring Eric Bana and Jennifer Connelly. Like any Hollywood superhero movie, *The Hulk* is full of flashy effects and computer-generated graphics. And like many Hollywood movies these days, Macs played an integral part in the production—this time in coming up with the Hulk's design as well as the movie's conceptual art and previsualization sequences (computer-generating the final Hulk was a job for SGI machines and penguin boxes, aka Linux).

This spring, *MacAddict* visited the award-winning visual effects powerhouse ILM in San Rafael, California. There we met up with Mann and Tang to find out how they used Macs to design the Hulk and establish the movie's scene sequences. A quick drive north over the Golden Gate Bridge and we were on our way to digital nirvana...



Hulk
THE BEGINNING
The Incredible Hulk started life as a Marvel Comic character created by Stan Lee and Jack Kirby in 1962.

HULK IMAGES COURTESY OF ILM/UNIVERSAL



Hulk

NAME GAME The Hulk's alter ego is physicist Dr. Robert Bruce Banner. He took the name David Banner when *The Incredible Hulk* came to TV. In the movie *The Hulk*, he's once again known as Bruce Banner.

The Art-Directing Duo

Strip-mall hell! Not exactly where we envisioned the site of a premier visual effects conglomerate—but that's all we could see while waiting for our visitors'

PHOTOGRAPH BY MARK MADEO



ILM art directors Wilson Tang (left) and Jules Mann (right).

passes. But once we were granted access and entered ILM's magical kingdom, we gawked as we strolled past *Jurassic Park* trees, a carbonized Han Solo (not the classic version), a *Harry Potter* 2 Quidditch matte painting (created on a Mac), Darth Vader, the Energizer Bunny, and even a few fruity iMacs on our way to meet *The Hulk*'s two art directors.

Unfortunately, being art directors at a prestigious company doesn't necessarily net you a lot of space. Mann and Tang work together in cramped quarters, surrounded by a menagerie of ILM-created models and toys from *Star Wars*, *Jurassic Park*, *Star Trek*, *Men in Black*, and other blockbuster films. A couple of G4s sit at their feet.

Though ILM upgraded all of its Macs to OS X in March this year, both Mann and Tang are still holding out in OS 9. According to Mann, "We have X, but we just rebel—

we don't use it." Tang adds, "We're not leaving Photoshop 5.5." When asked why they won't make the switch, Tang sums it up best: "You're driving a classic car like that and somebody says, 'Here, take this other steering wheel.' You don't want it. You know how to drive that car."

Because *The Hulk* was such a large project, ILM put two art directors on the movie. Tang dealt with the Hulk as a creature and actor, helping to define his look, gestures, characteristics, and movement. Mann was responsible for integrating the Hulk within his environment and defining his interaction with the elements around him.

Concept to Creature

The first challenge was to design the Hulk's physical being so that ILM's computer graphics team could bring the character to 3D life. This process involved deciding how big and brawny the Hulk should be, what his features should look like, and, of course, choosing the perfect shade of green.

Work began with a sculpted model of the Hulk (called a *maquette*) and director Ang Lee's casting of Eric Bana, who plays the Hulk's human alter ego, Dr. Bruce Banner. Mann and Tang also received pictures of Bana performing different facial expressions (mostly anger—the Hulk doesn't exactly grin a lot) as a reference so that the computer-generated (CG) character's expressions would bear some resemblance to Bana. They also took digital photos of the maquette, and brought those images into Adobe Photoshop to experiment

TOOLS OF THE TRADE

The following hardware and software tools are indispensable to ILM art directors Jules Mann and Wilson Tang.

- Power Mac G4, Mac OS 9 and OS X, 512MB of RAM, 40GB disk space (www.apple.com)
- SGI monitors (www.sgi.com)
- Wacom Intuos 17-inch tablet (www.wacom.com)
- Adobe After Effects, Illustrator, and Photoshop (www.adobe.com)
- Corel Painter (www.corel.com)
- Electric Image (now part of Universe, www.electricimage.com)
- ILM OpenEXR (www.openexr.net)
- NewTek LightWave 3D (www.newtek.com)
- Nikon Coolpix 900 (www.nikonusa.com)

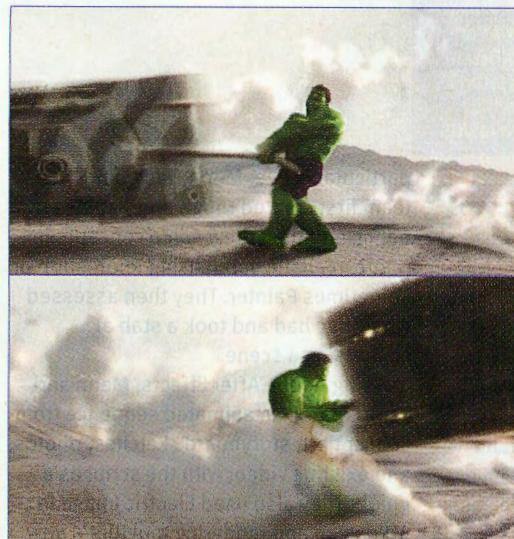
BEFORE Tang wanted to make the Hulk's eyes more realistic in this 3D render.



AFTER Using Photoshop, Tang added a shadow below the upper lid, gray and red tones to the white of the eye, highlights and sharpening to the bottom lid, and reflection and color flecks in the iris.



BEFORE Tang created these concepts using Photoshop and Electric Image to detail the lighting and environment in a story sequence, and gave them to the CG team for reference.



AFTER And here's the scene, created by the CG team, as it appears in a frame of the actual movie.



with different facial mutations.

Mann and Tang worked on much of this developmental phase with Ang Lee sitting alongside them. Mann gives props to the Mac for making this process work. "Because we are on a Mac, it's so much faster than a lot of the SGI stuff because we have Photoshop and a scanner and a digital camera. We played with 50 different color palettes, taking elephant's skin and using Photoshop [to layer] it on [the Hulk's face], playing with his hair, taking his facial features and actually elongating his jaw and widening it."

To establish the Hulk's full-body characteristics, they videotaped a body builder—as Mann puts it, "a big, buff guy"—to study his movement and apply it to the Hulk's design. But they didn't want to make the Hulk too human. As Mann points out, "He's a creature, and he's 15 feet tall and green and a thousand pounds, so there have to be some cinematic things that plus it out—that make it over the top, a little more comic book-like."

ILM's team of 2D conceptual artists created anatomical sketches of the Hulk on paper. Mann and Tang sent these sketches, along with their images and some comic-book reference material, to the CG modelers, who then sculpted the Hulk into a rough 3D form. From these renders, Tang and team defined the Hulk's more-detailed characteristics—skin textures, facial and body hair, and muscle form, for example—using Photoshop to illustrate ideas and insert corrections onto the renders for the CG team.

Mann and Tang also began working on incorporating the Hulk into the movie. Using Photoshop (and sometimes Corel Painter), they created drawings and photorealistic images, called *concept art*, to illustrate various story points. For example, they showed how dirt should appear on the Hulk's skin, developed landscape environments around the Hulk, and even mapped out the gradual disintegration of the Hulk's tattered trousers (Mann showed us his own shorts, which they scanned in as reference scrap material—no, he wasn't wearing them when he showed them to us). All of this art went to the CG team, who integrated the Hulk anatomically (in animated 3D) into movie scenes.

Storyboarding on Steroids

To lay the groundwork for what should visually happen in a scene, Mann and Tang used their Macs to create pre-visualization, or *pre-vis*, sequences—a process that takes storyboarding to the next level by combining assorted media and animating them to flesh out a scene's sequence and visual angles. Pre-vis allows the director to get a sense of what a scene will look like and how it'll flow with existing footage before it's greenlighted for production.

"Traditionally, [pre-vis] is meant [to illustrate] camera position and lens choices and just rough blocking, but more and more what we're trying to do is animate concepts," says Tang. "We're able to bust out rough-looking shots that have the mood, the palette, and the lighting to help guide some of these sequences."

In *The Hulk*, pre-vis generally started with the movie script, some rough sketches, and Ang Lee's notes on a



These shorts inspired the ones that ended up on Hulk's body.

Hulk

MEAN AND GREEN Banner designed the gamma bomb (G-bomb), which detonated and irradiated him. As a result, Banner turns green and becomes the Hulk when he gets excited and enraged.

Hulk

FAMILY TRAUMA Bruce Banner's father, Brian, was an alcoholic who murdered Bruce's mother, Rebecca. Years later Bruce accidentally killed his father at his mother's gravesite.

ANATOMY DAILIES: FIXING FLAWS TO KEEP IT REAL

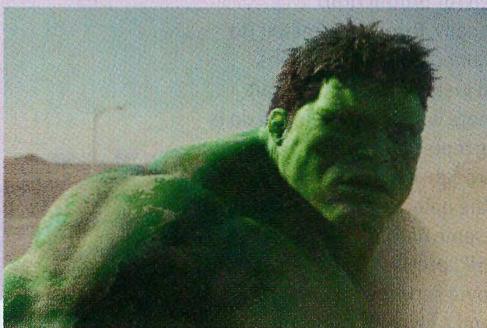
To make the Hulk look convincing, Mann and Tang inspected renders and created correction diagrams on their Macs to show the CG team what to fix.



BEFORE Using Photoshop, Mann and Tang drew on top of the image (usually including written notes in Photoshop) to highlight changes for the CG team. In this scene (see above), Mann and Tang wanted to mess up the Hulk's hair more, add wrinkles and skin folds to his face, and reshape his deltoid and trapezius muscles, collarbone, cheekbones, and facial muscles. An additional sketch (see below) gave the CG team a more detailed outline of how to restructure the Hulk's face and reshape his eyelids. It also showed how wrinkles and skin folds should appear.



AFTER The CG team then incorporated the changes and produced another CG render for the art directors to once again inspect for approval. This is the final approved render.



particular scene. Mann, Tang, and team first created rough story guides in pencil and then drew some concepts in photo-realistic detail using Photoshop or sometimes Painter. They then assessed what they had and took a stab at composing a scene.

Using Adobe After Effects, Mann and Tang created an animated sequence from concept art, storyboard sketches, photos, and existing video, with the script as a guide. They also used Electric Image (a 3D design and rendering tool that's now sold as part of Electric Image's Universe app) and NewTek LightWave 3D to add environments and camera angles to the scenes. The duo then sent the sequence to an editor, who dropped it into the movie to see how everything flowed. Says Mann, "With the Mac, it was great because we could jump into Photoshop and then go over to After Effects [and] animate it. We're totally set up with EXR files [OpenEXR, ILM's open-source image file format with a high dynamic range], and we're color-calibrated with the SGI side, so everything we send over is directly usable."

The pre-vis helped speed the workflow and kept the movie's progress moving forward steadily. "[The sequence] is not just a still piece of art—or even just an animated piece of art," Mann explains. "The editor can take and drop [the sequence] in his cut of the movie, and it will fit with the timing and the dialogue and the pacing and everything."

The duo would then present the sequence either to Lee or to Dennis Muren or Ed Hirsch (the two visual effects supervisors) for approval. Half the time, their ideas wouldn't even be close to what Lee was thinking, but

they'd talk, get a better idea of what direction to go in, and forge on. "We're able to take a stab at it and get closer and closer, we hope, to what he was envisioning, and I think we've been fairly successful," says Tang.

What was Ang Lee envisioning? What was it like to conceptualize a big green guy that Lee likens to lichen? And what about abstracting Lee's ambiguous themes of bonsai trees, jellyfish, and galaxies? "There's a whole world going on in Ang's mind," says Mann. "We basically get pieces fed to us as we go along." As a teaser, Mann showed us a trippy pre-vis scene they dubbed "electricity father" that plays on these themes. You'll have to wait for the movie to see it for yourself.

Checks and Balances

The work didn't end there. The CG team had to send every render to Mann and Tang, who pored through the sequences on their Macs to make sure the Hulk looked and interacted believably with the real world (or as real as a world can be when you have a 15-foot brawny green giant running amok in it). Mann and Tang refer to this morning ritual as *anatomy dailies* (see "Anatomy Dailies—Fixing Flaws to Keep It Real," left).

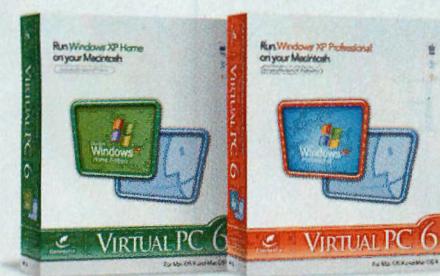
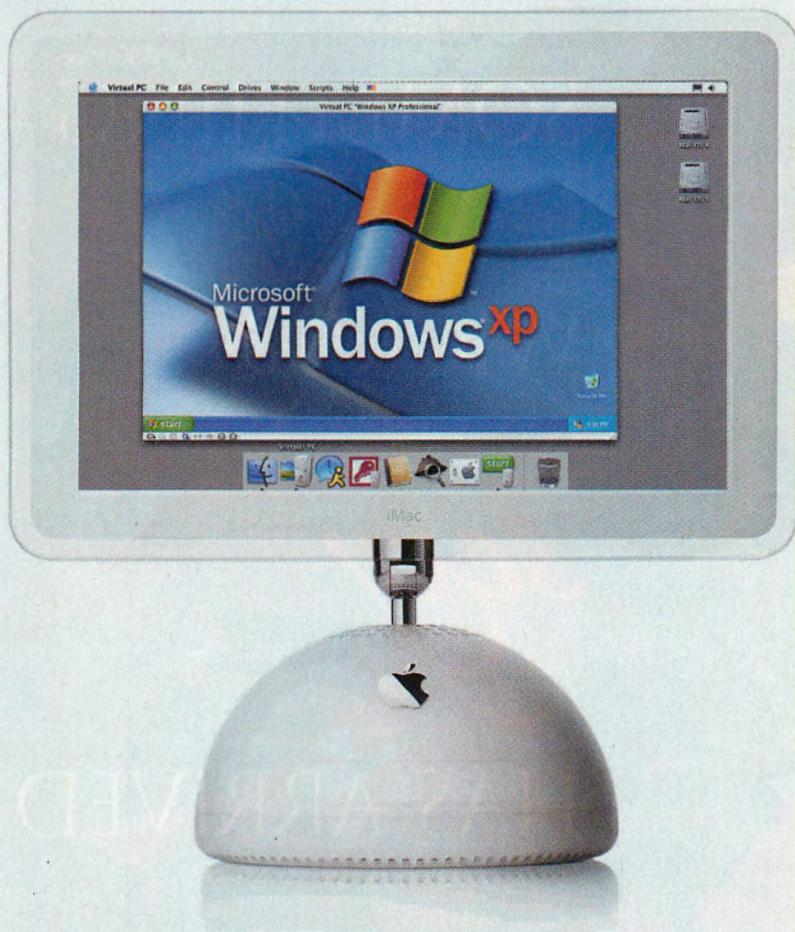
If something didn't look right, Mann and Tang used Photoshop to draw corrections on top of the CG render and sent it back to the technical directors and CG team for fixing—sometimes as often as 30 times a day. "We'd say, 'Look at this. If this was a real body, there'd be love handles,'" says Tang.

This process continued until they finished each sequence, and ultimately the entire movie—and Mann and Tang say Macs made it easier. "We would be pulling our hairs out," says Tang, "if we didn't have tools like the Mac and Photoshop."

Knowing what effect such frustration and anger might have on Bruce Banner, we're pleased that the Mac helped keep things mellow during the creation of *The Hulk*.

Though she's glad Lou Ferrigno isn't reprising his role, Kris Fong is convinced that the Hulk looks more like ex-baseball player Jose Canseco than like Eric Bana.

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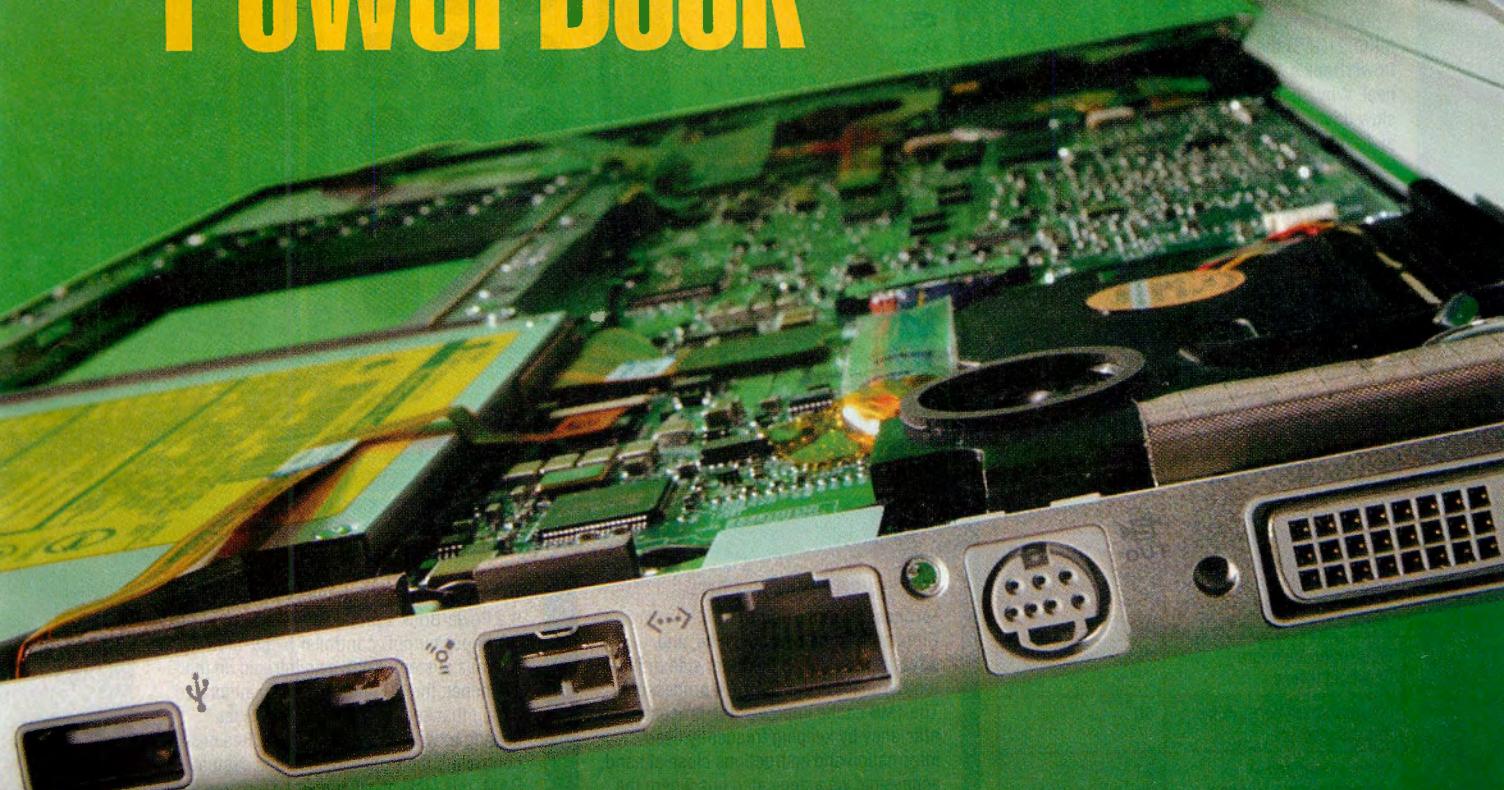
UNAUTHORIZED
AUTOPSY

We can't help it. Every time Apple unveils another miracle of industrial design, we feel compelled to experience it not just front to back, or side to side, but also *inside out*. In other words, we need to see what's under the hood.

So what else could we do but dissect the 17-inch PowerBook G4 and behold its inner beauty with our very own eyes?

Just remember, don't try this at home if you value your PowerBook and its warranty—although we're happy to report that this PowerBook suffered no harm or ill effects from our autopsy.

Inside the 17-Inch PowerBook



by Niko Coucouvanis
photography by Mark Madeo

SPRING HINGES

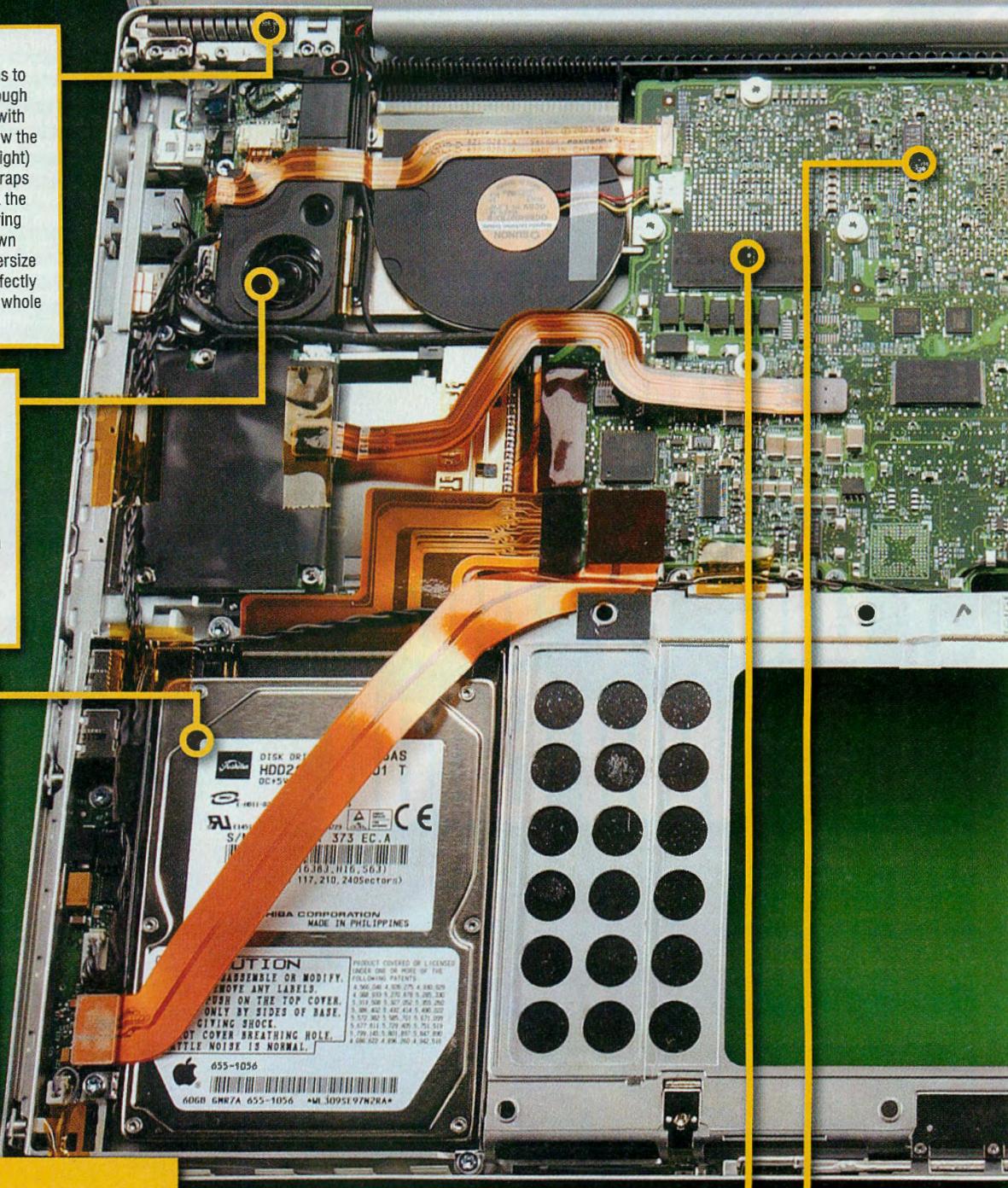
The PowerBook's lid seems to defy gravity, swinging through its entire range of motion with little friction—yet somehow the screen stays put (and straight) at any angle. These two straps of tightly wound steel (aka the helical counterbalance spring assembly) are torqued down sufficiently to keep the oversize yet starlet-thin screen perfectly straight and taut. That's a whole lot of torque.

SPEAKERS

See those black speaker-looking things? Well, those are the speakers, which are fed by the PowerBook's Snapper sound circuitry. Unfortunately, the 17-inch PowerBook doesn't have the midrange-enhancing third speaker that the 12-inch model has.

HARD DRIVE

We affectionately call this pair of high-density metal platters (technically speaking, a 60GB Toshiba MK6021GAS) the PowerBook's Achilles heel. Why? It's a slow drive, spinning at 4,200 rpm (faster laptop drives spin at 5,400 rpm), which Apple likely chose for its low power requirements. On the plus side, tiny rubber rings on the drive's mounting brackets act as shock absorbers.

**Number of...**

| | |
|--|---------------------|
| Pounds | 6.8 |
| Inches | 15.4 by 10.2 by 1.0 |
| Megabytes of included RAM | 512 |
| Pixels in huge-ass screen | 1,296,000 |
| Fiber-optic keyboard-backlight threads | 270 |
| Minutes spent performing this autopsy | 60 |
| Screws removed to accomplish this autopsy | 21 |
| Dollars we'd be in debt if this autopsy had failed | 3,299 |

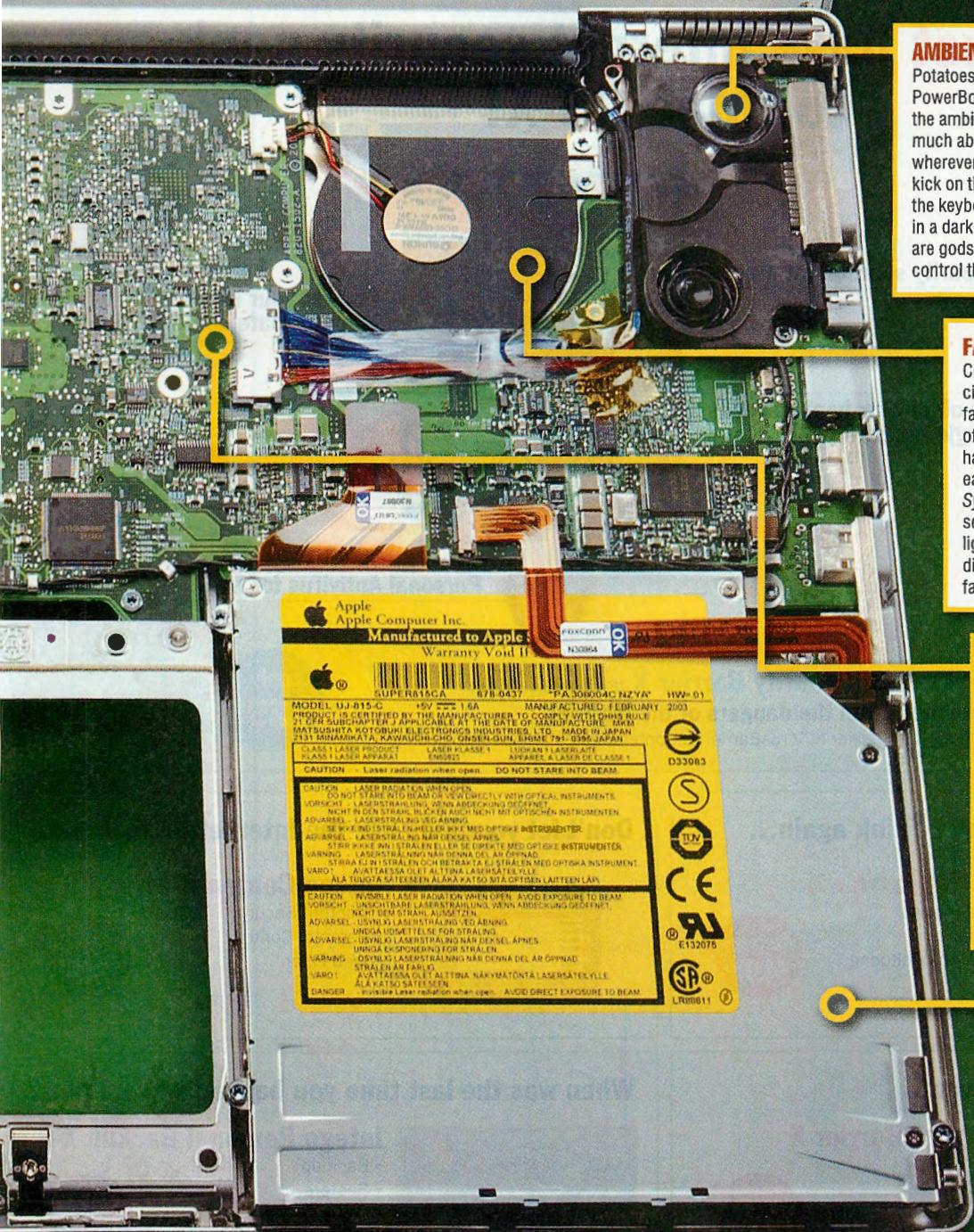
PROCESSOR AND L3 CACHE

(processor: underneath)

Right here is the Level 3 cache, and directly opposite on the other side of the motherboard is the 1GHz G4 processor. The 1MB cache improves the processor's efficiency by keeping frequently used information and instructions close at hand, accessible via a dedicated bus where the bits can flow at ridiculously fast rates (up to 3.2 GBps) without interference from other system components.

I/O CONTROLLER (underneath)

If a PowerBook's processor is the brain, its I/O (input/output) controller is the central nervous system. Known as Intrepid on the 17-incher, the I/O controller is an integrated circuit that keeps all the bits and bytes flowing to where they need to go. Besides controlling the front-side bus and system RAM, this jack-of-all-trades chip governs the FireWire, Ethernet, AGP, PCI, and both ATA buses (Ultra ATA/100 for the hard drive and ATA/33 for the SuperDrive).



AMBIENT LIGHT SENSORS

Potatoes have eyes, and now so do PowerBooks...sort of. These babies are the ambient light sensors you've heard so much about. They monitor the ambient light wherever your PowerBook happens to be, and kick on the fiber-optic lighting system under the keyboard whenever they sense that you're in a dark room. Proving that Apple engineers are gods among men, these sensors also control the LCD screen's backlighting.

FANS

Cooling all the PowerBook's hot circuitry is a pair of blower-style fans—the one on the left is in charge of the processor; the one on the right handles the video chip. Printed on each are the words *Magnetic Levitation System*, which we first thought was the secret to the Big 'Book's surprisingly light weight. We were disappointed to discover this label simply described the fans' bearing technology.

VIDEO CHIP (underneath)

We hate calling the PowerBook's bountiful screen a resource hog, but those 1.3 million pixels (1,440 by 900) can't push themselves. The sizable screen requires a brawny video system, and that's exactly what it's got, courtesy of nVidia's GeForce4 440 Go graphics chip. The 440 Go features a processor clock speed of 189MHz and a 64MB frame buffer in addition to its 64MB of DDR SDRAM.

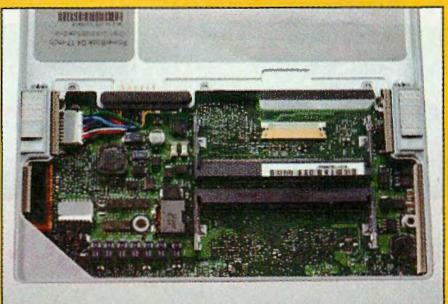
SUPERDRIVE

The SuperDrive comes from Matsushita rather than Pioneer or Sony, which make the DVD burners in Apple's desktops. This isn't an extra-cost BTO (that's built to order, not Bachman-Turner Overdrive) add-on—the SuperDrive is standard issue on all 17-inch PowerBooks. Notice the cable connecting the SuperDrive to the motherboard—it's flat, as is the hard drive's connector cable. When the whole machine is only an inch tall, every single vertical millimeter really counts.

On the Flip Side

Underneath the PowerBook is the battery bay. Next to it are two slots for RAM (the 'Book comes with one 512MB PC2700 333MHz DDR SDRAM SO-DIMM¹ memory module—which we removed for this picture). This arrangement not only provides easy access when you upgrade your RAM, it also contributes to the sturdy feel of the keyboard. Previous PowerBooks featured removable keyboards for RAM access—and consequently offered a less-sturdy typing experience.

¹Gaze in awe at the new *MacAddict* acronym-length record of 32 characters, which demolishes our previous 23-character record set on page 40 of our Nov/02 issue.



Associate Editor Niko Coucounavis hopes that Steve Jobs doesn't read *MacAddict* so he doesn't kill Niko for taking apart this PowerBook.

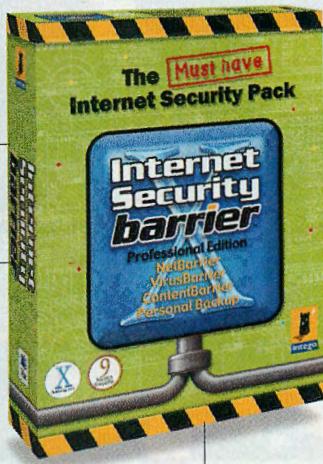
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we protect your world.

What's MacAddict doing reviewing monster-movie action figures? This is no garden-variety Godzilla pictured here—this is FireWire Dino, a fully functional four-port FireWire 400 hub. The Dino can't handle the FireWire 800 hard drive we reviewed this month, but he arrived just in time to interface with the new iPod—lucky lizard. In the near future, we'll pit a 1GHz iMac against a 1GHz eMac, and let 'em duke it out for the consumer-Mac crown.

 Compatible with Mac OS X or later.

 Compatible with Mac OS 9 or earlier.



If we were shopping for this type of product, this is the one we'd buy.

This Month:

- 44 15GB iPod MP3 player
- 45 20-Inch Cinema Display LCD monitor
- 54 d2 DVD-RW FireWire 400 DVD-RW drive
- 50 Enigma 1.1 3D puzzle game
- 55 FireWire Dino FireWire 400 hub
- 46 i950 Photo Printer six-color inkjet printer
- 48 InTools 1.0 Adobe InDesign plug-ins
- 54 iPod Armor iPod case
- 52 Mac FlipAlbum 3 photo-presentation software
- 49 Master of Orion 3 strategy game
- 53 Mercury Elite Pro FireWire 800 hard drive
- 47 Optio 430RS 4-megapixel digital camera
- 50 PowerWave USB audio interface and amplifier
- 54 Presentation Remote presentation controller
- 55 TextWrangler 1.0 text editor
- 55 Universal Media Drive memory-card reader
- 45 Wireless Optical Desktop Special Edition keyboard and mouse
- 52 World Book 2003 Jaguar Edition electronic encyclopedia
- 51 Xenofex 2 Photoshop plug-in suite

PLUS:

The Hot List

56 The best of the best from recent reviews.

MacAddict RATINGS

| | |
|---|-------------------------|
|  AWESOME | You'll be blown away. |
|  GREAT | You'll be impressed. |
|  SOLID | You'll be satisfied. |
|  SO-SO | You'll be disappointed. |
|  LOUSY | You'll be pissed off. |

15GB iPod

MP3 PLAYER

And we thought the original iPod was cool (Feb/02, p44). Now it looks like a frumpy late-1980s minivan when parked next to the new, oh-so-racy third-generation iPod. Apple's latest version of its market-leading MP3 player redefines "insanely great."

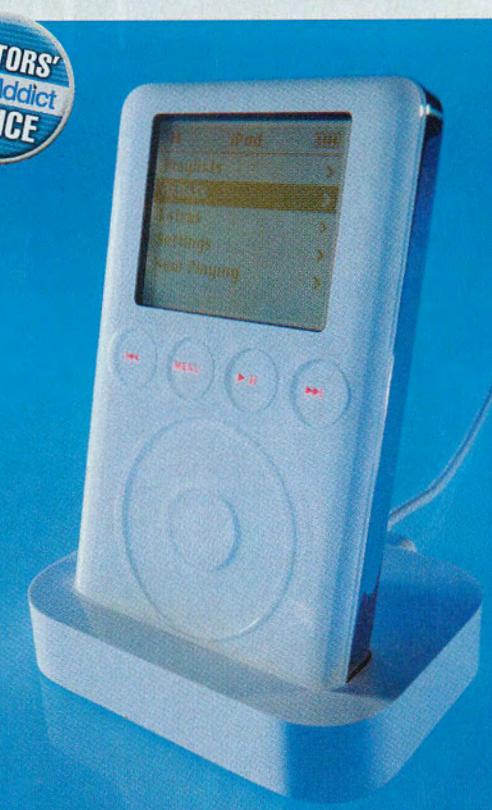
When we opened the box containing our 15GB test unit, the first thing we noticed was how much was in it. Sharing the box with the iPod was a dock (more on that later), a thin and flexible 70-inch FireWire cable, a handsome case with a belt clip, a compact AC-to-FireWire charging brick, a six-pin-to-four-pin FireWire adapter (for the peccy crowd), high-quality earbuds on a 45-inch cable, a clip-on remote on a 35-inch cable, and an iPod-size drawstring pouch for toting around all the accessories. The box also contained a CD with both Mac (iTunes) and Windows (MusicMatch) software, documentation, and a smattering of spoken word samples from Audible.com.

After we freed the iPod from its protective clear-plastic shield—with "Don't Steal Music" prominently displayed in four languages—we were impressed by its diminutive dimensions: over 20

Apple's latest market-leading MP3 player redefines "insanely great."

percent thinner and about 14 percent lighter than our old 10GB iPod, and with a new curved-edge faceplate that makes it seem thinner still.

From its solid-state controls to its redesigned ports, everything about the iPod exudes class. Its 2-inch LCD screen's LED backlighting, for example, while



Rarely is a sequel so much better than the original. Think *Godfather II*.

not as bright as the electroluminescent backlighting in earlier models, to our eyes makes the display easier to read.

Repositioning the control buttons—also solid state—above the scroll wheel was also a smart move; they're now easier to navigate without undue thumb contortions. Their red backlighting is a touch of design genius, since red is the ideal color for your eyes to adjust to in the dark. Even the top-mounted hold button has a more-positive feel.

And about those redesigned ports. The headphone port now has a next-door-neighbor port containing the pins that control the remote. The FireWire port has been moved to the bottom of the iPod, and is now a multipin slot rather than a simple six-pin port. Do these extra pins imply

future uses for the remote port and multipin FireWire slot? Only Steve knows—and he's not talking.

The FireWire slot mates with a connector in the aforementioned battery-charging and iTunes-syncing dock—a 2.6-by-3.1-by-.6-inch slab of white plastic that holds the iPod at a comfortable reading angle, and that includes a line-out audio port and a slot for the multipin FireWire cable. Two other classy dock touches: a nonskid underside and a friendly three-note chime that tells you the iPod has been correctly seated. Nice.

After loading 11.5GB of tunes into the iPod in 45 minutes, we were able to listen for 8 hours before its rechargeable battery died—over an hour less than our 10GB iPod used to play before its battery started to age.

The iPod's version 2.0 software adds a sleep timer and alarm to the clock, two new games (Parachute and Solitaire), and

an On-The-Go playlist that lets you create playlists...uh...on the go rather than only from the host Mac's iTunes. Sound quality is excellent for both MP3 and AAC files—half of our testers said the new iPod sounded better than the old, half said the reverse, and all said the perceived difference was minuscule.

One last note: When we listed the accessories that came packed in the iPod box, we neglected to mention two that prove you can count on Apple to provide that little extra something—soft foam earbud covers and a tiny plastic plug to protect the FireWire slot. Both are small and light—and easy to lose, so Apple includes an extra pair of earbud covers and an extra slot plug. Thanks, guys.

—Rik Myslewski

iPods, left to right: third-generation 30GB and 15GB, first-gen 10GB, and second-gen 20GB. Together they can hold either 18,700 4-minute songs or one 52-day drum solo.



COMPANY: Apple

CONTACT: 800-795-1000 or 408-996-1010, www.apple.com

PRICE: \$399

REQUIREMENTS: Mac: built-in FireWire port, Mac OS 10.1.5 (10.2 or later recommended). Windows: PC with built-in FireWire or USB 2.04 port, or with Windows-certified FireWire or USB 2.0 card; Windows ME, 2000, or XP

GOOD NEWS: Totally, insanely cool. Gorgeous. Compact. Great features. Improved buttons and backlighting.

BAD NEWS: Highly scratchable. Parachute game is hard to win. (OK, so we're reaching...)

MacAddict RATED

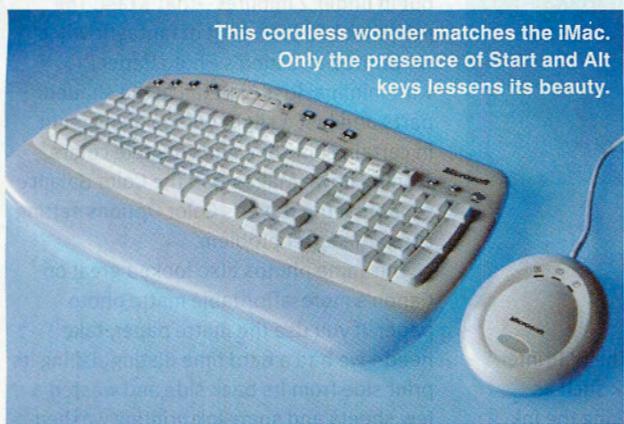


AWESOME

Wireless Optical Desktop Special Edition

KEYBOARD AND MOUSE

In a beautiful white finish with chrome touches, both members of Microsoft's Wireless Optical Desktop duo look and feel great. The touch of the keyboard is just the way we like it—responsive and clicky



This cordless wonder matches the iMac. Only the presence of Start and Alt keys lessens its beauty.

(meaning the keys make a nice hearty click when you press them). The two-button scroll-wheel mouse is the same as the Wireless Optical Mouse Blue we reviewed—and liked—in our January issue (p56), only this one is white. And the best part is that one USB receiver talks to both mouse and keyboard, which cuts down on cable clutter.

The keyboard's chrome buttons are preprogrammed to do things like launch your Documents, Pictures, and Music folders; eject the CD tray; and call up your default email app and Web browser. The coolest

COMPANY: Microsoft
CONTACT: 888-218-5617, www.microsoft.com
PRICE: \$84.95

REQUIREMENTS: USB-equipped Mac, Mac OS 8.6 to 9.x or 10.1, 30MB disk space

GOOD NEWS: Attractive. Keyboard has a really nice feel. Single receiver for both mouse and keyboard cuts down on cords.

BAD NEWS: Keyboard labeled for Windoze users. Microsoft-centric software.

MacAddict RATED

SOLID

X
9

parts are the play, stop, volume, and other buttons that control iTunes.

If you still begrudge Microsoft its questionable due, you'll find a few things that will make your blood boil. The keyboard features Alt and Start keys where the Command and Option keys should be (although they work just fine—it's just the principle of the matter). Another annoyance is the keyboard software. You can't reassign a key to launch just any app—you must choose from a list (which includes many Microsoft apps). So you can't reassign, say, the Messenger button to open iChat.

A few more gripes: There's no power button on the keyboard. Also, as of press time, the software only supported Mac OS 9 and OS 10.1, so you can't do things like assign function keys. Microsoft promises a Jaguar update in May.

If you can live with these annoyances, this is a sweet set of hardware. But hurry—this special edition is only available for a limited time. If you miss out, you'll have to settle for the regular black and silver (go Raiders!) version.—Cathy Lu

PHOTOGRAPH BY MARK MADEO

20-Inch Cinema Display

LCD MONITOR

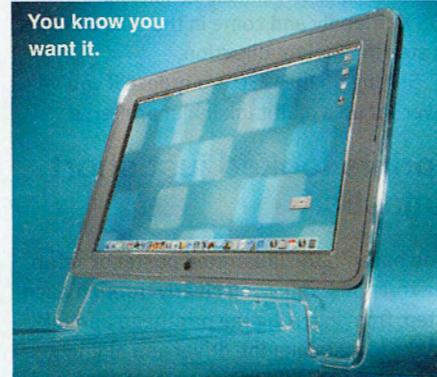
Apple's 20-inch Cinema Display, with its wide-format 1,680-by-1,050-pixel resolution, is a great display for movie enthusiasts, graphic designers, and any other Mac user persnickety about image quality. And at \$1,299, it won't quite break the bank.

As with other Apple LCDs, the 20-inch Cinema Display is outfitted with a translucent, upward-tilting form factor and two powered USB ports. It also has the unique-to-Apple ADC connector, so hooking it up to an ADC-equipped Mac takes about 30 seconds and hooking it up to a DVI-connected PowerBook (using

Apple's DVI-to-ADC connector) takes only about a minute.

In our test photographs of faces and food, the display handled subtle color nuances well, showed sharp contrast, and a good level of brightness. We barely noticed any horizontal or vertical viewing-angle problems. Spec-wise, its 350:1 contrast ratio and 230cd/m² is on par with other 20-inch displays, although you'll find slightly brighter and higher contrast models in the same price range (see "Add 3 More Inches!" Jun/03, p30, for info on a few other 20-inch LCDs).

You really can't go wrong with an Apple



Cinema Display if you've got the cash and a video card that supports it. Those who have older video cards will need to upgrade, but weren't you looking for an excuse to do that anyway?

—Narasu Rebbapragada

COMPANY: Apple
CONTACT: 800-795-1000 or 408-996-1010, www.apple.com
PRICE: \$1,299

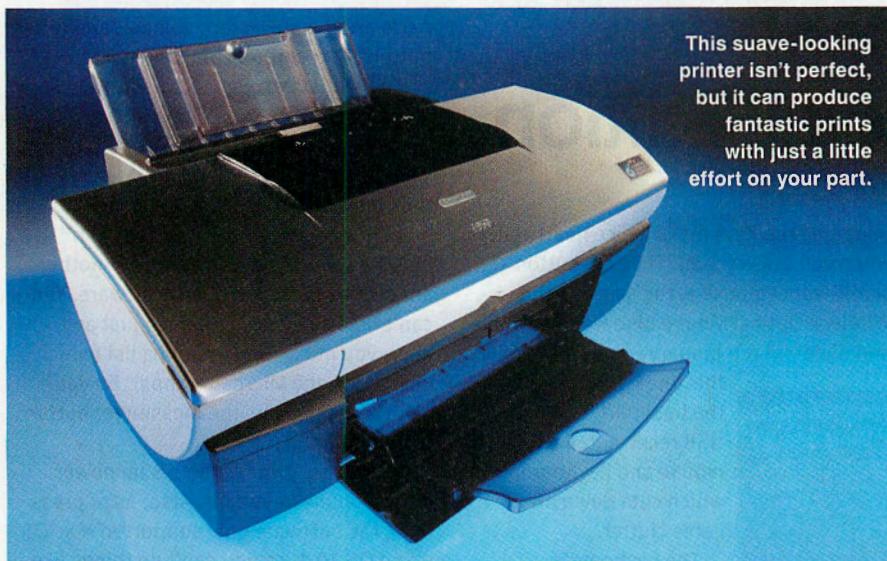
REQUIREMENTS: G4; Mac OS 10.2 or later; nVidia GeForce2 MX, GeForce3, GeForce4 MX, or GeForce4 Titanium, or ATI Radeon 7500, 9000 Pro, or 9700 Pro graphics cards; ADC port (or DVI-to-ADC adapter)

GOOD NEWS: Great design and image quality.
BAD NEWS: Brighter and higher-contrast LCDs available for the same price.

MacAddict RATED

GREAT

X
9



This suave-looking printer isn't perfect, but it can produce fantastic prints with just a little effort on your part.

i950 Photo Printer

SIX-COLOR INKJET PRINTER

The latest in Canon's line of iPrinters is the i950 Photo Printer, and it's a fine specimen of inkjet. Sporting six individual-color ink cartridges and spraying out 2-picliter droplets (through 3,072 nozzles), the i950 pleased us with its speedy, quiet operation, accurate color (most of the time), and slower-than-most ink consumption. But we're not so thrilled with its bundled software and driver—though they are Mac OS X-friendly and come in the box, which is a step in the right direction.

Setting up the i950 is a breeze if you've ever set up a multitank inkjet printer; if

is a welcome improvement. The BJ Printer Utility also handles busywork such as cleaning the printhead, checking the ink nozzles, and giving you a graphical display of the level of ink remaining in each tank.

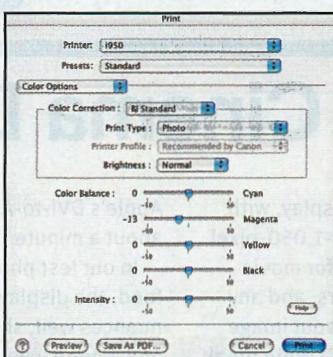
This printer supports all of the latest inkjet juju, such as borderless printing (in OS 10.2 or later), index printing for printing multiple images per sheet, basic color correction, and some special effects we'll never use, such as Simulate Illustration.

Printing from Photoshop, iPhoto, and the supplied ImageBrowser software (more on that in a bit) taught us that borderless printing only works when you print from ImageBrowser. We couldn't get a completely borderless print out of iPhoto or Photoshop, despite futzing with all of the driver's settings.

The OS X-compatible ImageBrowser software is adequate (and welcome), but not terribly impressive. Its editing tools are

The prints looked just short of fantastic.

you haven't, the illustrated poster of setup instructions walks you clearly through each step, from inserting the printhead and ink tanks to installing the driver and aligning the printhead. Which brings us to the good part—that printhead alignment function, along with the whole BJ Printer Utility kit, is now integrated into OS X's Print Center. In the past, we had to track down the printer utilities manually in our Applications > Utilities folder, so Print Center integration



Turn down the magenta a bit, and photos come out nearly perfect.

limited to Crop, Color Adjustment (Hue, Saturation, and Lightness sliders), and image resizing, but it gets your photos from the camera to the Mac to the printer, and that's what it's all about. You also get PhotoStitch, a fun app for stitching a series of images into panoramas (if this sells you on the i950, know that you'll need a tripod and some patience to get a decent panorama out of *any* software).

We were pleased to see high-quality, 8.5-by-11-inch borderless color photos come out in under 2 minutes—that's fast. The prints looked just short of fantastic when we printed to Canon's Photo Paper Pro, with minimal loss of detail in the shaded parts and just a slight twinge of magenta in certain skin-tone and concrete colors. Turning down Magenta in the Color Balance section of the driver's Color Options setting cured the latter problem.

The same photos also looked great on Canon's more-affordable matte photo paper. If you use the matte paper, take heed—we had a hard time distinguishing its print side from its back side and wasted a few sheets and some ink printing washed-out, mottled prints on the wrong side. (Tip: Look at the paper in sunlight and print on the whiter side.) Speaking of wasted ink, the i950 is surprisingly frugal with the

pigment—after cranking out 30 8.5-by-11-inch and 20 4-by-6-inch color prints at maximum quality, the ink level information showed our photo cyan and photo magenta at about 40 percent remaining and about 20 percent of the yellow ink gone, while black, cyan, and magenta appeared full. A visual inspection revealed that the other tanks weren't *completely* full, but close.

We've seen better photo printers, but for the price, the i950 is quiet, fast, and pretty accurate with color. We were also impressed with its modest appetite for ink, which makes this printer more affordable in the long run.—Niko Coucouvanis

X
9

COMPANY: Canon
CONTACT: 800-652-2666,
www.canon.com
PRICE: \$249.99

REQUIREMENTS: USB-equipped Mac, Mac OS 8.6 to 9.x or 10.1 and later, 20MB RAM (128MB for OS X)

GOOD NEWS: Fast and quiet. Frugal with ink. Prints most photos superbly. Good text too.

BAD NEWS: Slightly magenta-happy. Borderless printing doesn't always work. A little pricey.

MacAddict RATED
SOLID

Optio 430RS

4-MEGAPIXEL DIGITAL CAMERA

There's a lot to like about Pentax's 4-megapixel Optio 430RS; it's a svelte, stainless-steel beauty with plenty of features that most point-and-shoot digicams lack. Though the Optio has its quirks, none is fatal.

For starters, the Optio 430RS has a bigger, brighter optical viewfinder than many others in its class, and you can adjust it to suit your eyesight. It also packs 11MB of built-in memory (BYO CompactFlash card) and a Manual mode for setting aperture and shutter speeds to creatively control your images.

It's a beauty with plenty of features that most point-and-shoot digicams lack.

Granted, the aperture choices are somewhat limited: f-2.8 or f-5.0 when the lens is at its widest field of view and f-4.8 or f-9.2 at maximum telephoto (most

to flip the mode dial to playback so we could view our results. Surprise! There's no dedicated playback mode. Instead, you press the OK button (centered in the four-way rocker switch on the camera's back) to view your last shot, then use the rocker switch to navigate back and forth through the shots. This allows the camera to stay in the record mode so you're always ready to capture the moment.

Ironically, though, you can't take another picture for at least 4 seconds when the camera's set to its highest resolution. Still, unless you're shooting action sequences, this shouldn't be a killer, just a minor annoyance. There *is* an alleged burst mode, but it's just as slow. Shutter lag (from the time you press the shutter until the picture

Pentax packs a lot of pixels into this svelte silver case.

onscreen guide, and then reposition the guide to take the second image. Of course, your subjects can't be moving, but people in the foreground are OK as long as they can hold their pose for a few seconds. The 3D mode is nifty, but nothing to base a purchasing decision upon.

The camera lacks video out (a surprising omission, considering it's a standard feature on most digicams), but it has plenty of other niceties: a logical layout, easy-to-access menus, a night-scene mode, manual focus, a silent-movie mode, eight digital filters for special color effects, and a 62-city world time map. You can also shoot time-lapse photos, move to within 4 inches of your subject, and bring up a histogram to make sure your exposure is right on before you shoot.

The Optio 430RS is powered by a 3.7-volt rechargeable LiIon battery and includes an external charger. It ran down in about an hour with the 1.5-inch LCD and flash in use about half the time—you'll need a spare if you do more than occasional shooting. The sharp and accurately colored images we captured pleased us, though the camera sometimes slightly overexposed very bright scenes. Setting the exposure control to the minus side easily corrected that.

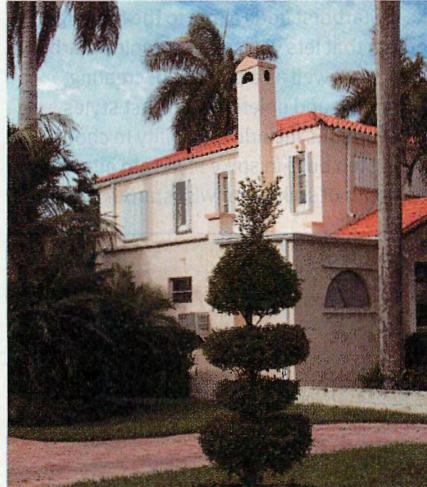
Overall, this diminutive digicam packs good pixel power and performance into its rugged, sensible design. If you want a digicam companion that can go up mountains, down rivers, or across deserts, the Optio 430RS should take it all in stride.—Arthur Bleich



The Optio 430RS can capture extremely sharp images, as shown in this lion statue and surrounding foliage.

cameras offer a range). But coupled with shutter speeds from 4 seconds to 1/1,000 second, there's enough variety to freeze fast action or come up with a nice soft-focus background for a portrait.

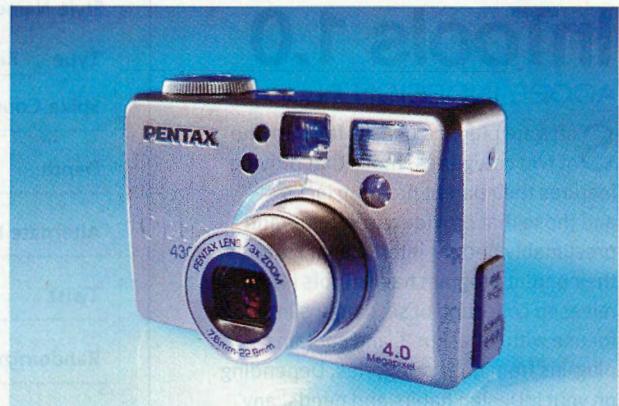
After shooting a few pictures, we went



We were also impressed with its accurate colors and fine detail in both shadowed and highlighted areas.

is actually taken) is also a bit on the long side, but acceptable.

One of the Optio 430RS's neat features is a 3D mode that captures and then lets you view stereo pictures using an included viewer. You shoot the first image using an



PHOTOGRAPH BY MARK MADEO

COMPANY: Pentax

CONTACT: 800-877-0155, www.pentax.com

PRICE: \$499.95 (street)

REQUIREMENTS: USB-equipped

Mac, Mac OS 8.6 to 9.2 or 10.1

or later

GOOD NEWS: Excellent design. Compact but not cramped. Good image quality. Simple operation.

BAD NEWS: Slow shot-to-shot time. No video out.

Burst mode no faster than regular shooting.

MacAddict RATED



GREAT

InTools 1.0

ADOBE INDESIGN PLUG-INS

Software plug-ins usually fall into one of two categories: those that provide features their parent program lacks and those that provide a different—and presumably better—interface for features their parent program has. InTools is a newly released collection of six plug-ins intended for use with InDesign 2, and contains plug-ins from both categories. Depending on your InDesign habits and needs, any one of them might be your ticket to InDesign bliss.

If you're a new InDesign user who once used QuarkXPress (and who isn't these days?), you may find yourself resorting to old habits when working with InDesign—for example, looking for a Modify dialog. Like the Modify dialog in QuarkXPress, the InModify dialog contains several controls for modifying objects, and like QuarkXPress, the controls

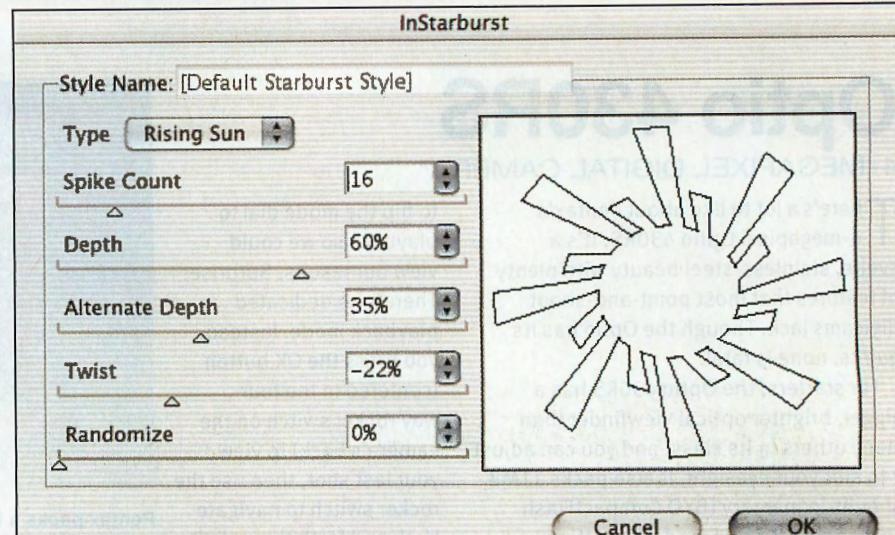
Any one of these plug-ins may be your ticket to InDesign bliss.

vary depending on the type of object (Picture Frame, Text Frame) you select. Although it doesn't add any features to InDesign, the InModify dialog makes modifying objects easier and faster by combining many object-modification controls that are otherwise scattered among several InDesign palettes.

Like the Merge feature in QuarkXPress, InPathfinder lets you combine multiple objects to create a single object. InDesign's built-in capabilities (Compound Path) in this area are limited, so if you need to create complex shapes or you're a QuarkXPress convert who lived by the Merge feature, InPathfinder fills a big hole in InDesign. Illustrator users will find that the controls in the InPathfinder palette are similar to Illustrator's Pathfinder feature.

InNudge adds a palette that lets you move and rotate objects incrementally according

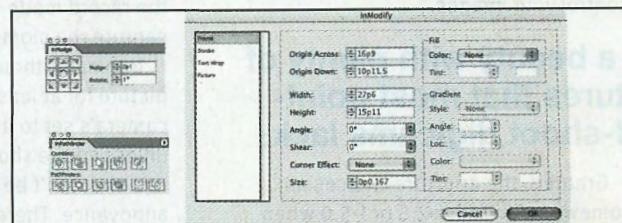
to your specified default Nudge and Rotate values. In addition to nudging items by clicking icons in the palette, you can also



We've got a thing for starbursts, so InStarburst is our favorite part of InTools.

use the keyboard arrow keys, and when you do, the current Nudge value applies. This one will spare our mousing hand a lot of fatigue.

If you crave more options than InDesign's Polygon feature provides, InStarburst may be just the fix. InStarburst adds a tool to the InDesign toolbar that lets you create complex starburst shapes, as well as a palette for creating, modifying, and deleting starburst styles. Other options include the ability to choose among ten built-in spike styles, to alternate the depth of spikes, to twist starburst shapes,

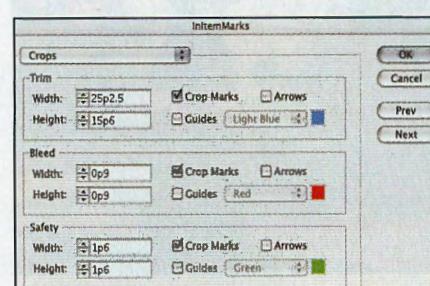


These productivity-enhancing, object-tweaking tools saved us tons of time and mousing.

and registration marks to individual objects and pages. When you create crop and press marks, InItemMarks creates the marks with InDesign objects (frames, lines, and so on) and places them on a new layer. If you like to create your own crop and press marks, or if your printer has requirements InDesign's built-in Marks & Bleeds print options can't handle, InItemMarks is the ticket.

Finally, InPrint lets you click and drag to select an area of a page or spread for printing or export. In addition to InDesign's export support (PDF, EPS, HTML, XML, SVG, and SVG Compressed), InPrint adds TIFF, ScitexCT, JPEG, and GIF support.

Ultimately, rating plug-ins is a contextual endeavor. A single plug-in can be worth the price of an entire collection if it fills a crucial hole in your workflow. On the other hand, a large collection of plug-ins has little value if the plug-ins don't make you more productive. InTools' ability to streamline object-modifying, -grouping, and -nudging chores, and of course its starburst tool, earned this toolbox a spot in our InDesign kit. —John Cruise



InItemMarks adds more than just convenience—this is the only way to roll your own crop and print marks in InDesign.

and to create random spikes. The possibilities are endless. If you require industrial-strength starburst capabilities, InStarburst alone is worth the price of admission.

With InItemMarks, you can add crop marks



COMPANY: ALAP
(A Lowly Apprentice Production)
CONTACT: 888-818-5790,
www.alap.com

PRICE: \$99.99 (single user), \$449.99
(five-pack), \$849.99 (ten-pack)
REQUIREMENTS: Mac OS 9.1 or
later, Adobe InDesign 2.0

GOOD NEWS: Solid performance. Intuitive, InDesign-like interface.
BAD NEWS: Relatively small number of plug-ins for price.
Some plug-ins only marginally useful.

MacAddict RATED

SOLID



Master of Orion 3

STRATEGY GAME

If you're a fan of galaxy-size, turn-based, civilization-building strategy games overloaded with mind-numbing detail, you're in for a treat. Master of Orion 3 is here. And it's huge—bigger than its predecessors, more complex, and stuffed with information.

The new Orion space frontiers are clearly more complicated than in previous games. You get light years of history, 16 rival factions vying for territory, piles and piles of planetary systems, and enough information screens to satisfy an anal-retentive librarian.

As with all civilization-building games, you spend your time utilizing the four standard Xs (explore, expand, exploit,

Orion 3 is way bigger than its predecessors.

and exterminate). You begin at home base with a couple of scout ships and a colony ship, exploring and colonizing your own star system. Then you spread out to gobble your corner of the galaxy before someone

else moves in. Eventually you encounter other species—that's when the fun (and the final X, exterminate) begins. Choose your weapons—will you beat the enemy with your military forces, drive them to financial ruin through economics, or finesse them with diplomacy?

Unfortunately, getting to the battles takes time. Movement at the beginning is slow, almost ponderous. It can take 50 or 60 turns of exploration, colonization, research, and spaceship-building before confrontation and combat finally emerge to liven up the game. But once you start clashing with alien races over territory, the game gets hot and stays hot.

Until then, try not to let the deluge of detail snow you under. This game is so heavily loaded with information that it may overwhelm even experienced gamers. It's all available on special situation screens, where you can find data on the 16 customizable alien races, more than 300 technologies in six schools of science, and hundreds of star systems and planets on huge galaxy maps. Each newly occupied planet needs its own micromanaged budget, taxes, industry, spaceships,



Battles in Orion involve massive space fleets, so the view is generally small but intriguing.

Info screens offer access to diplomatic messages, votes in the Orion senate, and a matrix that shows the current status of all alliances.

terraforming, bioharvesting centers, and mines. Lots and lots of work to do, right?

Ah, this is where the game developers got a bit too cute. They invented planetary viceroys, automated brains to run your planets and tend to your spreading civilization. In fact, they do so much that there's little left for you. You determine where to send your space fleets, set up a few spies, allocate your research time, take care of any diplomatic feelers that come your way, and click the button that starts the next turn. And that's about it.

That's good news for those who find micromanagement tedious. If you prefer to make your own choices, you can overrule your viceroys' decisions, but you have to check back frequently to make sure your adjustment stays in place—otherwise the viceroy will take charge again as soon as you disappear.

Combat is in real time and very slow. You can issue detailed attack orders, but battle fleets are so small graphically that it's probably best to let the AI do your fighting. Just point your fleet at the enemy, click the Attack button, and sit back to watch the battle.

Multiplay works well. Orion is fun to play against other humans, and it's faster. Most turn-based civ-building games allow players to issue between-turn orders one after another, and the delay can be interminable. But Orion requires players to issue orders simultaneously, so turns come more quickly.

The system requirements are modest, thanks to the paucity of eye-candy graphics, but the game has good balance. If you can work your way through the difficult early learning curve, you'll find yourself hooked. Orion is deep, rich with detail, and filled with strategic choices. Don't play it near a clock. You'll be horrified by how much time it can eat up.—John Lee

COMPANY: MacSoft
CONTACT: 866-512-9111,
www.macsoftgames.com
PRICE: \$49.99

REQUIREMENTS: Mac G3 350MHz or faster, Mac OS 8.6 or OS X 10.1.5 or later with 128MB RAM, 800MB free hard disk space

GOOD NEWS: Loaded with alien races and options. Richly detailed backstory. Modest system requirements.
BAD NEWS: Automated viceroys leave little to do. Skimpy graphics.

MacAddict RATED

SOLID

Enigmo 1.1

3D PUZZLE GAME

We never thought Chinese water torture would seem like fun—then Enigmo came along. Now our dreams are filled with an endless procession of water drops...drip, drip, drip.

Enigmo's premise is simple. The goal of the game is to herd water droplets dripping from a spigot into a receptacle using a variety of water-directing widgets. Your

It's like Chutes & Ladders, only fun.

widgets (located in a parts inventory list at the side of your screen) include bumpers, which bounce and redirect the stream up and over obstacles; slides, which gently guide the drops across shorter distances; particle accelerators, which give the stream a boost in speed and trajectory; and sponges,



Enigmo 1.1.1 demo

which soak up drops and conform them into a smooth stream.

All you do is drag a widget from the parts inventory into the stream of droplets to change the flow of water to your advantage. For instance, you could just drag the bumper over and tweak its angle and positioning so that it effectively redirects the flow of water into the container. That's the first level; as you progress, the distance (and the maze of walls and openings) between spout and bucket grows, as does the booty in your parts inventory. It's like Chutes & Ladders, in which you use widgets to get where you want to be, only it's actually fun. Manipulating the parts is a click-and-drag



Can't you just hear the arcade-game music? Enigmo is a puzzler done right.

affair, and easy to master.

For even more waterworks fun, create custom games with up to 50 levels each, which you can share with other Enigmo players. You'll be amazed at how much time this simple game sucks out of your life, but that's the sign of a great game.

—Niko Coucouvanis

X 9

COMPANY: Pangea Software

CONTACT: 512-367-8116,

www.pangeasoftware.net

PRICE: \$19.95

REQUIREMENTS: 400MHz G3, Mac

OS 9.2 or 10.1 or later, 128MB RAM, ATI

Rage 128 or nVidia GeForce2 graphics card

(Radeon or GeForce3 recommended)

GOOD NEWS: Addictive fun. Challenging. Building your own levels is way easy.

BAD NEWS: Addictive, yet fairly mindless. Music might drive you insane.

MacAddict RATED



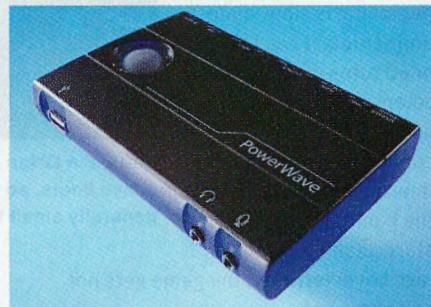
GREAT

PowerWave

USB AUDIO INTERFACE AND AMPLIFIER

The Griffin PowerWave is a small (a bit larger than two iPods), versatile audio gizmo, combining in one piece of hardware a variety of tools for the Mac audiophile.

First, as an input device, PowerWave sports stereo RCA ins and outs, and a 1/8-inch mic in, plus a headphone jack for latency-free monitoring; a level switch lets you boost mic level signals—from a turntable, for example—so you can pipe the sound into your Mac at line levels. We used it to archive old records we couldn't find in the Apple Music Store (for a detailed description of the process, see "How to Digitize Vinyl and Audiocassettes," p60). If you'd rather make your own music, you can also use



Catch this wave and you'll be rockin' audio into and out of your Mac.

the PowerWave to record voices through a mic or instruments via direct line in.

Although the PowerWave doesn't require any specific software, you'll need something to capture and manage the sounds it inputs; the bundled disk offers trial versions of Peak LE 3, Deck 3, and MegaSeg. We used a Sound Studio 2.1 trial (www.felttip.com).

As an output device, the PowerWave can act as a mini desktop amplifier, allowing you to power home speakers through an included breakout box that connects to standard stereo-speaker cables (Griffin also sells the box solo for \$25)—handy indeed for the laptop or iPod owner who wants to pump up the party on the go. But wait, there's more: A special jack custom-made for Apple's Pro Speakers allows you to connect them via the PowerWave to any USB-enabled computer.

If we have any complaint, it's the purposeless big blue light on top that turns off only when you unplug the PowerWave. We'd lose the light and make the device that much more compact.

If your needs are limited to getting sound cleanly into your Mac, you'll find cheaper solutions—such as Griffin's \$35 iMic—but the included output options make the PowerWave a good value.

—Christopher Imlay

X 9

COMPANY: Griffin

CONTACT: 615-399-7000,

www.griffintechnology.com

PRICE: \$99.99

REQUIREMENTS: USB-equipped Mac,

Mac OS 9.1 or later

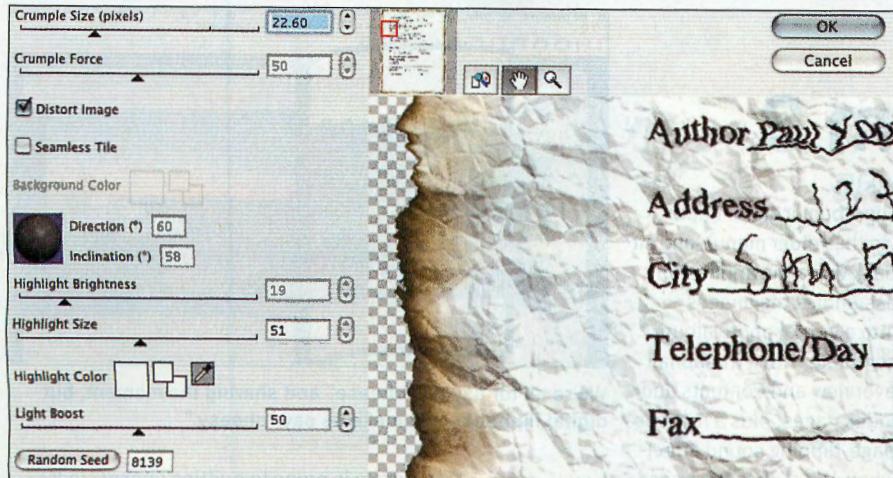
GOOD NEWS: Easy. Simple. Useful.

BAD NEWS: Gratuitous blue light is silly.

MacAddict RATED



SOLID



Xenofex 2

PHOTOSHOP PLUG-IN SUITE

Alien Skin Software has a knack for making Photoshop filters that beg to be used in gleefully creating mischief, but that retain enough legitimate uses to justify their purchase. Xenofex 2 is no exception, offering retooled versions of some old favorites as well as brand-new filters for photo-manipulating fun (or work, if you must).

Xenofex 2 boasts 14 filters (4 brand-new ones), although in all honesty the Classic Mosaic filter appears to descend directly from its predecessor (Baked Earth), and

Xenofex is way fun to use.

despite what the manual says, version 1 did have a Shatter filter. These are minor quibbles, especially in light of the improvements made in other areas. The Rounded Rectangle, Origami, Stamper, Shower Door, and Distress filters have been replaced with Cracks, Rip Open, and Burnt Edges. Most of these are self-explanatory (what do you think Little Fluffy Clouds does?), but can often be combined in unexpected and creative ways to generate truly unique effects.

Even the Flag filter, which we feared would look cheesy, was

Xenofex's Burnt Edges and Crumple filters give this document that hip distressed look.

surprisingly realistic—real enough for Web work, at least. Flag and Crumple both feature a pseudo-3D distortion, which warps or crinkles your image to depict its dimensionality more accurately (and to show off the lighting effects, presumably). Electrify and Lightning—two similar effects with different implementations—allow you to select the color, amount of branching, and other variables involved in whipping up some electricity, and were way fun to use.

Of all the filters, Constellation and Puzzle seemed like the ones we'd use least frequently, but if you're in the business of making puzzle Web sites, you'll appreciate the ability to knock out random pieces and fiddle with the connectors, groove width, and highlight size of your puzzle bits. That's the thing about Xenofex—all of the components perform admirably, but we have a hard time envisioning a need to use any of them more often than every few months.

We encountered one small-but-annoying disappointment: the uncharacteristically rushed-seeming manual. In addition to its false claims of five new filters, it's littered with typos that a good proofread would have caught. Granted, these flaws don't constitute a deal-killer, and the fact that we've noted them at all is a testament to how little we found to complain about in Xenofex 2.—Paul Yoon



COMPANY: Alien Skin
CONTACT: 888-921-7546, www.alienskin.com
PRICE: \$129, \$99 (upgrade), \$69 (upgrade)

REQUIREMENTS: Power Mac; Mac OS 9.1 or 10.1 or later; 64MB RAM; Adobe Photoshop 6.0 or Photoshop Elements 2.0 or later, or Macromedia Fireworks MX or later

GOOD NEWS: Great improvements since version 1. Cool effects. Solid interface.

BAD NEWS: Prone to hideous misuse by Web designers. Lackluster manual. Limited uses.

MacAddict RATED

GREAT



Who's looking at the files on your old computer?

- NEWS FLASH -

Associated Press
 January 2003

"...simply deleting a file, or even following that up by emptying the 'trash' folder, does not necessarily make the information irretrievable."

Don't risk putting your computer files into the wrong hands.

Protect your email, financial figures, client correspondence, address book, student records, business plans, medical records, graphics, HR files, and more.

SuperScrubber permanently erases all the files and data from your hard drive or partition.

Make SuperScrubber a part of your personal and business security plans.

It's easy to use.
 It's bargain priced.
 It's the smart thing to do.



Jiiva

www.SuperScrubber.com

Mac FlipAlbum 3

PHOTO-PRESENTATION SOFTWARE

When we think of e-books, we generally think of literature retrofitted for ultimate portability on handheld PDAs: electronic books. Little did we know, E-Book Systems also makes Mac FlipAlbum—software for creating virtual

FlipAlbum icon (or import via the Folder menu), and sit back while the application assembles the images into a virtual photo album, complete with a thumbnail overview and Contents and Index pages, plus a realistic page-flipping sound effect when you click to flip pages.

Venture into the preferences and you can turn off the silly flip sound; create a playlist of background music from MP3s (or WAV or MIDI files); or set up autoflipping and all manner of themed patterns, colors, and layout options for the cover and pages. Further customization includes Annotations—Stickies-style notes with customizable color, size, font, and placement. Unfortunately, the



We're all for saying "cheese" and sharing the moment, but digital flipbooks just make us say "cheesy."

We'll stick with iPhoto's classier slide shows.

photo albums. And yes, flipping faux book pages on the Mac's desktop is as ridiculous as it sounds.

If you don't want any custom titles, background music, or other jazz, FlipAlbum's default modus operandi is the definition of *quick 'n' dirty*. Just drag a folder full of images onto the Mac



COMPANY: E-Book Systems
CONTACT: 866-532-8080
or 408-625-8000,
www.flipalbum.com

PRICE: \$39.95 (boxed), \$34.95 (download)
REQUIREMENTS: 450MHz G3 (700MHz
G4 recommended), Mac OS 10.1.3 (10.2
recommended), 256MB RAM

GOOD NEWS: Makes slide shows look less corporate.
BAD NEWS: Makes slide shows look awfully cheesy.

program is prone to quitting unexpectedly when you start customizing the book; its general performance felt clunky on an 800MHz TiBook.

We'll endure a lot of inconvenience if the end result justifies the effort, but that's not the case with Mac FlipAlbum. Frankly, we find it silly at best. We'll gladly forego FlipAlbum's buggy gimmickry for iPhoto's infinitely classier slide shows.—Niko Coucovanis

MacAddict RATED

LOUDY

World Book 2003 Jaguar Edition

ELECTRONIC ENCYCLOPEDIA

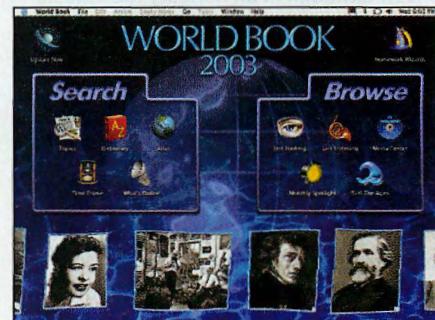
We've always been fans of the World Book encyclopedia. If there's any subject you want to know about—be it ocelots, Apple, or World War II—the World Book CD will boil it down to a good, clean overview. What this CD-ROM doesn't do

The main interface is the best-looking part of World Book 2003.

according to the type of music you select from the Just Listening menu. For instance, choose Jazz and you'll see images of jazz greats sailing by—clicking any picture will take you to more info.

Unfortunately, the oohs and ahs end there. Most of the articles suffer from Salon.com syndrome—text paragraph after text paragraph with few pictures and even fewer sound and video clips. For instance, our aforementioned search on *ocelot* didn't even provide us with a picture.

World Book does have some nice features, though. With an Internet connection, you can update the content to get the major news headlines for each day from the past month. The Chart and Timeline wizards help you



put together materials you might need for a report. The Quiz wizard is a basic tool for testing yourself. The Notepad allows you to grab pictures from the CD and create a basic layout for a report. The Atlas's cool globe allows you to calculate the distance between major cities. And you can double-click any word to get a definition from the included dictionary.

World Book 2003 is definitely a good tool for students of all ages—but it has the potential to be so much more.—Cathy Lu

Definitely a good tool for students.

is take full advantage of all the Mac's cool multimedia capabilities—and that's too bad.

The coolest thing about World Book 2003 is its main interface. The menu options appear on top of a beautiful rippling blue background that would make Steve Jobs proud. Pictures scroll along the bottom

COMPANY: World Book
CONTACT: 800-967-5325, www.worldbook.com
PRICE: \$68, \$39.95 (upgrade from 2002 edition)

REQUIREMENTS: 300MHz Power Mac or faster, Mac OS 10.2 or later (will run on 10.1.5 but without 10.2-specific features), 128MB RAM, 130MB disk space

GOOD NEWS: The best place to get an overview of just about any subject. Cool main interface.
BAD NEWS: Lacking in multimedia goodness.

MacAddict RATED

SOLID

EDITORS'
MacAddict
CHOICE

The see-through look may be passé, but the drive inside is pure tomorrow.



Mercury Elite Pro

FIREWIRE 800 HARD DRIVE

The Mercury Elite Pro FireWire 800 hard drive from Other World Computing (OWC) is built around a snappy 180GB 7200 rpm IBM Deskstar drive coupled with an Oxford 922 bridge that feeds two FireWire 800 ports. A FireWire 400 and a USB 2.0 port are also included.

The first FireWire 800 drive we reviewed, the LaCie d2 200GB FireWire 800 drive (see *Reviews*, Jun/03, p47), strutted its best stuff when opening and transferring large files. The Mercury Elite Pro displays the same tendency in spades. In fact, when opening a 2GB Photoshop file, the Mercury Elite Pro opened it over 13 percent faster than both the LaCie d2 and the 120GB Seagate Barracuda ATA V inside our test platform, a Dual 1.42GHz Power Mac.

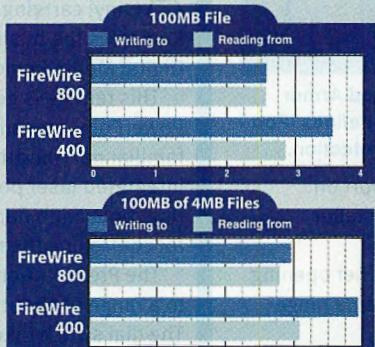
File transfers were equally impressive, with the Mercury Elite Pro keeping pace with the LaCie d2 when reading and writing 2GB files, and edging ahead slightly when reading and writing a 100MB file and 100MB of 4MB files. The big surprise came when we ran our most drive-head-thrashing test: transferring a folder containing 100MB of 4KB files. Writing this packet-o-pain to the Mercury Elite Pro took only about half as long as writing it to the d2, and it read the

same folder nearly three times as fast.

Our one quibble is its case—it's easy to open should you want to slip a larger drive into it, but it's a wee bit cheesy compared to other drive vendors' cases. No big deal, though—it's a great drive.—Rik Myslewski

800 vs. 400

The Mercury Elite Pro is as fast or faster than other FireWire 800 drives we've tested—but how does it perform against itself when hooked up to a fast Mac's FireWire 400 port? Quite well indeed.



COMPANY: Other World Computing

CONTACT: 800-275-4576, www.macsales.com

PRICE: \$379.99

GOOD NEWS: Fast when transferring or opening files over FireWire 800—even very small files. Quiet. Good software bundle.

BAD NEWS: Easy-open case isn't terribly solid.

REQUIREMENTS: FireWire- or USB-equipped Mac (FireWire 800 port recommended)

MacAddict RATED
X
GREAT

PUPPY

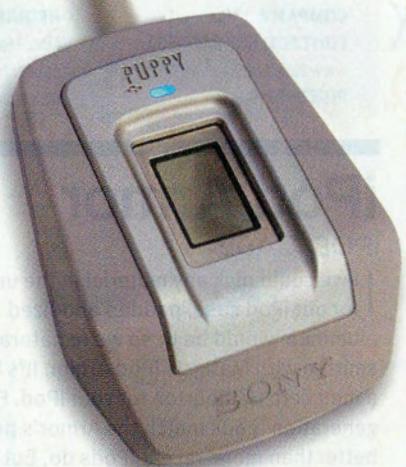
Fingerprint Authentication

for

Mac OS X



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is your password.



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d2 DVD-RW

FIREWIRE 400 DVD-RW DRIVE

Burning DVDs is great, but what if your Mac isn't naturally endowed with a SuperDrive? LaCie's d2 DVD-RW drive packs the super Pioneer DVR-105 drive mechanism, which burns DVDs at 4X speed. That works out to 4.7GB in about 15 minutes. The d2 comes with software that lets you author basic video DVDs without spending beaucoup bucks on a pro application like DVD Studio Pro (or on a new Mac).

The d2's software, CaptyDVD, is basically a knockoff of Apple's iDVD 3.

We give d2 the nod over its competitor, the Devideon.

With CaptyDVD, you can import QuickTime DV movies—from iMovie or Final Cut, for instance—and then use lots of prefab background and button themes to build your navigation menus (thankfully

you can also import your own menu art). Other highlights include the ability to add audio clips to menus, to create photo slide shows, and to generate a Scenes menu quickly by placing chapter markers in a video clip. Unfortunately, CaptyDVD creates menus that can only go forward and backward, instead of jumping nonlinearly from one item to another.

CaptyDVD is versatile too: It lets you encode video at different quality levels, so you can fit more than an hour on a DVD-R disk (but image quality suffers a bit). On the downside, CaptyDVD isn't nearly as easy to use as iDVD (we actually had to read the manual!), its themes aren't as slick-looking as iDVD's, and it doesn't support motion menus,

LaCie's rugged d2 case is starting to grow on us—this one houses a fast, 4X DVD-RW drive.

where the background is a moving video image. Overall, CaptyDVD is about on par with Formac's Devideon software (see *Reviews*, Apr/03, p53), but CaptyDVD's chapter markers are less limiting than Devideon's. LaCie also sells CaptyDVD separately for \$149, but we'd pass.

We still prefer our built-in SuperDrive and iDVD, but we give LaCie's d2 the nod over its competitor, the Devideon, for a superior case design and slightly more flexible software.—*Helmut Kobler*



COMPANY: LaCie
CONTACT: 503-844-4500,
www.lacie.com
PRICE: \$359

REQUIREMENTS: FireWire-equipped Mac, Mac OS 9.1 or 10.1.2 or later (10.1.5 or later for CaptyDVD software), 4GB disk space recommended

GOOD NEWS: Fast drive (DVD 4X2X12X, CD 16X8X32X). DVD-authoring software included.
BAD NEWS: Authoring software not intuitive. Menu themes can be hokey.

MacAddict RATED
GREAT

iPod Armor

IPOD CASE

If we could pick any material in the universe for our iPod case, padded anodized aluminum would be it, so we're naturally smitten with Matias's iPod Armor. It's like a mini Zero Halliburton for your iPod. First-generation iPods match the Armor's portholes better than more-recent 'Pods do, but the case's portholes can accommodate the audio-out port on second-generation iPods as well. Sadly, the slightly taller third-generation iPods (see *Reviews*, p44) don't fit.

Accessing an armored iPod's controls requires either opening the case (it flips open toward you, clamshell-style, on a hinge at the bottom), or using the iPod's remote control.

If you're the type to throw your iPod in a backpack and go, this is the case for you; the cool look of anodized aluminum is just gravy.—*Niko Coucouvanis*

COMPANY: Matias
CONTACT: 888-663-4263,
www.ipodarmor.com

PRICE: \$49.95, \$54.95 (with belt clip)
REQUIREMENTS: iPod (any size)



iPod Armor
redefines iPod protection.

Presentation Remote

PRESENTATION CONTROLLER

A svelte and lightweight device designed with travel in mind (vinyl carrying pouch included), Keyspan's Presentation Remote is the business-class cousin of the company's way-cool Digital Media Remote (*Reviews*, Feb/00, p67).

This remote is geared for controlling Apple Keynote or Microsoft PowerPoint presentations, with the familiar next-and-back dial switch, an integrated laser pointer, and even a directional hub flanked by two buttons for controlling the mouse.

The Presentation Remote performed up to a range of about 40 feet, as advertised. The dial switch takes some getting used to, as does the cursor-control hub, but if you're bent on remotely controlling your presentations, learning the right touch is time well spent.—*Niko Coucouvanis*



Presentation Remote
lets you step away
from the keyboard.

GOOD NEWS: Good looks. Rugged protection.
BAD NEWS: Unyieldingly rigid. Annoying without iPod remote controller.

MacAddict RATED
GREAT

COMPANY: Keyspan
CONTACT: 510-222-0131,
www.keyspan.com

PRICE: \$79
REQUIREMENTS: USB-equipped Mac, Mac OS 9.1 or 10.1.3 or later

GOOD NEWS: Three handy tools in one.
BAD NEWS: Sparse documentation. Flimsy thumb switch. Frustrating mouse controller.

MacAddict RATED
SOLID

TextWrangler 1.0

TEXT EDITOR

If you're looking for a no-frills word processor, keep looking. TextWrangler is a muscular text editor, but it doesn't have a word processor's specialized formatting or WYSIWYG font menus. It also doesn't have the Web tools—site directory support, tagging tools, syntax checking, and so forth—that make its BBEdit forebear so

TextWrangler's kung fu is strong.

popular with the online crowd.

Web tools aside, however, TextWrangler's kung fu is strong; its grep searching, file filtering and general text munging is identical to BBEdit's, as is the FTP integration, rectangular text selection, support for files up to 2GB, multiple undos and clipboards,



TextWrangler 1.0 demo

COMPANY: Bare Bones Software

PRICE: \$49, \$199 (5-user pack), \$349 (10-user pack)

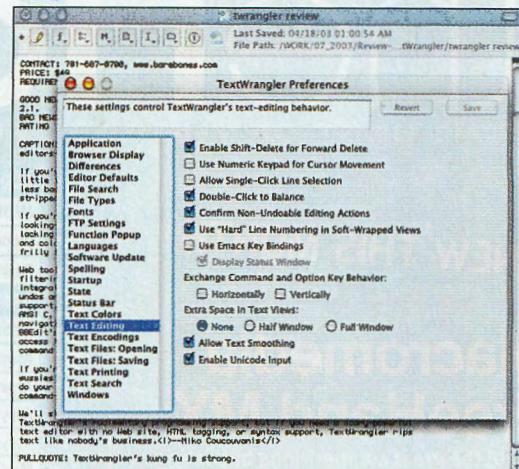
CONTACT: 781-687-0700,

www.barebones.com

REQUIREMENTS: Power Mac, Mac OS 9.1 or 10.1.5 or later (9.2.2 or 10.2.4 or later strongly recommended)

and plentiful preferences. In lieu of BBEdit's Web-coding support, TextWrangler provides syntax coloring and function navigation for more-traditional programming languages (ANSI C, C++, and Objective C), and integration with Apple's Project Builder 2.1 and later. TextWrangler also lacks BBEdit's Shell Worksheet feature, which gives OS X users direct access to the underlying Unix shell (although you can invoke TextWrangler from the Terminal's command line).

If you're one of those hard-core coders who thinks BBEdit's HTML tools are for wussies (in the old days, we typed out all our tags), but you still want to do your heavy text lifting through sensible dialog boxes instead of cryptic command-line tools, TextWrangler is made for you.



Look familiar? This general-purpose text editor carries on the respected BBEdit lineage.

We'll stick with BBEdit, despite TextWrangler's programming support (we prefer BBEdit's all-around overkill). But if you need a scary-powerful text editor with no Web tools, TextWrangler rips text like nobody's business.—Niko Coucouvanis

Universal Media Drive

MEMORY-CARD READER

If you rely on more than one type of Flash memory and you're tired of the clutter of media-card readers on your desk, LaCie has a solution: the Universal Media Drive.

Supporting six common media types (CompactFlash, SmartMedia, Memory Stick, SecureDigital, and MultiMediaCard), this svelte drive read every card we shoved into its face—the key word is shoved. While the drive let us read from and write to all manner of media, getting the cards into the drive caused us some minor angst. The CompactFlash slot in particular is tight.

As Flash memory evolves to faster speeds, we'll hold out for a FireWire multiple-media drive. Still, LaCie's offering is no slouch.—Niko Coucouvanis



Six media types, one drive.

COMPANY: LaCie

CONTACT: 503-844-4502,

www.lacie.com

PRICE: \$29.95

REQUIREMENTS: USB-equipped Mac, Mac OS 8.6 to 9.x or 10.1.2 or later



GOOD NEWS: Good looks, size, and performance.

BAD NEWS: Media-card slots are a little tight. Not a FireWire device.

FireWire Dino

FIREWIRE 400 HUB

FireWire hubs, like USB and Ethernet hubs, are difficult to review objectively. Either they work or they don't; after that, it's mostly a matter of personal taste. FireWire Dino is the coolest hub we've ever seen—it's a four-port FireWire hub built into a poseable Godzilla action figure—and it works.

The Dino got even cooler when we plugged in an iPod and its eyes and mouth lit up. Transferring files from the iPod to the Mac was only marginally slower when we connected the two via the Dino than it was with a direct connection.

Keep in mind that you'll need Dino's optional AC power supply if you plan on connecting more than one bus-powered device.

Hubzilla is way cool; just get one.—Niko Coucouvanis



PHOTOGRAPH BY MARK MADEO

This thing is much too big to be some lost dinosaur.

—Niko Coucouvanis, *Godzilla, 1998*

COMPANY: CharisMac

CONTACT: 530-885-4420,

www.charismac.com

PRICE: \$69.95, \$79.95 (with power supply)

REQUIREMENTS: FireWire 400-equipped Mac

GOOD NEWS: Coolest hub design ever.

BAD NEWS: Power supply and cables not included. No FireWire 800.



X 9

the Hot List

THE BEST OF THE BEST FROM RECENT REVIEWS

NEW THIS MONTH

Macromedia FreeHand MX

One of the great competitions between Mac-software stalwarts is the ongoing FreeHand versus Adobe Illustrator smackdown. According to reviewer and pro artist Matt Osborn, "With FreeHand MX, Macromedia is back on top—for the time being, anyway."

Power Over Ethernet

Reviews Editor Niko Coucouvanis always keeps an eye out for as-yet-unheralded products that solve nagging problems. Power Over Ethernet is a prime example. This simple set of cables allows you to mount your AirPort Base Station up to 250 feet from a power outlet. According to Niko, "It's a class act."



LaCie d2

The first FireWire 800 drive we got our eager little hands on didn't disappoint. Editor in Chief (and storage freak) Rik Myslewski said in his review, "This small, quiet drive can be a real time-saver if your work involves large files."

SHOPPING?
HERE'S WHAT WE
RECOMMEND

SOFTWARE

AUDIO

| | | | |
|---------------------------------|----------|-------------|---|
| MOTU Digital Performer 3 | \$795.00 | Feb/02, p58 | This pro-audio app has a great array of features. |
| PropellerHead Software Reason 2 | \$399.00 | Mar/03, p50 | It's the best software-synth bargain available today. |
| Roxio Toast with Jam 5 | \$189.95 | Sep/02, p49 | Burn CDs, MP3 CDs, DVDs, and VCDs and edit audio. |

GAMES

| | | | |
|---|---------|-------------|---|
| Ambrosia Software Escape Velocity: Nova | \$30.00 | Sep/02, p48 | Enjoy the perverse thrill of galactic domination. |
| Aspyr Jedi Knight II: Jedi Outcast | \$49.95 | Feb/03, p37 | Fantastic gameplay with both weapons and The Force. |
| Aspyr Medal of Honor: Allied Assault | \$50.00 | Oct/02, p43 | The WWII first-person shooter is a surefire classic. |
| Aspyr NASCAR Racing 2002 Season | \$39.99 | May/03, p57 | Realistic NASCAR racing on a Mac? Believe it. |
| Aspyr The Sims Unleashed | \$29.95 | May/03, p58 | Pixel pets abound in the best Sims expansion pack yet. |
| MacPlay No One Lives Forever | \$49.99 | Mar/03, p49 | A beautiful spy, sly foes, nifty gadgets, fast action—nice. |
| MacSoft Max Payne | \$40.00 | Dec/02, p42 | Max seeks revenge—and gets plenty of it in this FPS. |

GRAPHICS & LAYOUT

| | | | |
|----------------------------|----------|-------------|---|
| Adobe InDesign 2.0 | \$699.00 | May/02, p50 | Look out, Quark—Adobe's rival layout tool kicks butt. |
| Adobe Photoshop 7 | \$609.00 | Jul/02, p46 | Picture-perfect pixel pusher moves to Mac OS X. |
| Adobe Photoshop Elements 2 | \$99.00 | Dec/02, p40 | It has most of Photoshop's power for \$500 less. |
| FontLab 4.5.2 | \$549.00 | May/03, p53 | The font editor all type geeks have been waiting for. |
| Macromedia Dreamweaver MX | \$399.00 | Sep/02, p44 | Our favorite Web-design tool gets a strong upgrade. |
| Macromedia Flash MX | \$499.00 | Jul/02, p51 | It started in animation; now it can do anything. |
| Macromedia FreeHand MX | \$399.00 | Jun/03, p49 | In the race with Adobe Illustrator, FreeHand pulls ahead. |

PRODUCTIVITY & UTILITIES

| | | | |
|-----------------------------------|----------|-------------|--|
| Apple Keynote | \$99.00 | Apr/03, p48 | This presentation app was built for Mac OS X—and it shows. |
| Bare Bones Software BBEdit 7.0.1 | \$179.00 | Mar/03, p52 | By far the most powerful text editor money can buy. |
| Microsoft Office v. X | \$499.00 | Feb/02, p42 | The 800-pound gorilla of productivity applications. |
| Script Software CopyPaste-X 1.5.1 | \$20.00 | Apr/03, p61 | Shareware must be great to make the list. This clipboard is. |

VIDEO & ANIMATION

| | | | |
|--------------------------|----------|-------------|--|
| Adobe After Effects 5.5 | \$649.00 | May/02, p49 | This motion-graphics stud improves its 3D powers. |
| Apple DVD Studio Pro 1.5 | \$999.00 | Oct/02, p55 | Apple's essential DVD-burning app gets even better. |
| Apple Final Cut Pro 3 | \$999.00 | Apr/02, p45 | This pro-level video editor is a real-time revelation. |

HARDWARE

ACCESSORIES

| | | | |
|---------------------------------|----------|-------------|--|
| Dr. Bott's extendAIR Direct | \$149.95 | May/03, p51 | Make AirPort Extreme's range noticeably more extreme. |
| MacWireless Power Over Ethernet | \$29.98 | Jun/03, p61 | Mount an AirPort Base Station 250 feet from AC power. |
| XtremeMac UFO | \$129.95 | May/03, p59 | If you own a G4 iMac, you gotta get this way-cool hub. |

AUDIO

| | | | |
|-----------------|----------|-------------|---|
| Digidesign Mbox | \$495.00 | May/02, p59 | This audio interface is a traveling musician's delight. |
|-----------------|----------|-------------|---|

DIGITAL CAMERAS

| | | | |
|-----------------------------------|----------|-------------|--|
| Canon PowerShot S230 Digital Elph | \$399.00 | Mar/03, p48 | A great 3.2-megapixel camera in a tiny, low-cost package. |
| Nikon Coolpix 3100 | \$340.00 | May/03, p43 | The best point-and-shoot digicam we've seen yet. |
| Olympus C-4000 Zoom | \$499.00 | Jan/03, p52 | Great image quality, 4 megapixels, and versatile controls. |

DISPLAYS

| | | | |
|------------------------------|------------|-------------|--|
| Apple Cinema HD Display | \$1,999.00 | Aug/02, p40 | This 23-inch, 1,920-by-1,200-pixel beauty inspires lust. |
| Formac gallery 2010 Platinum | \$1,399.00 | Jan/03, p47 | Bright, fast, huge—and it costs only \$.0007 per pixel. |

PRINTERS

| | | | |
|-------------------------|----------|-------------|--|
| Brother HL-A141870N | \$699.00 | Aug/02, p45 | Need a sturdy laser printer? This one's a workhorse. |
| Epson Stylus Photo 2200 | \$699.00 | Oct/02, p42 | The most stunning photo printer we've ever tested. |

SCANNERS

| | | | |
|------------------------|----------|-------------|---|
| Canon CanoScan LiDE 30 | \$99.00 | Nov/02, p52 | This entry-level scanner gets the job done inexpensively. |
| Epson Perfection Photo | \$399.00 | Oct/02, p48 | This sophisticated scanner also handles transparencies. |

STORAGE

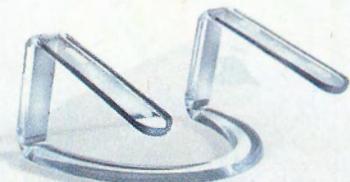
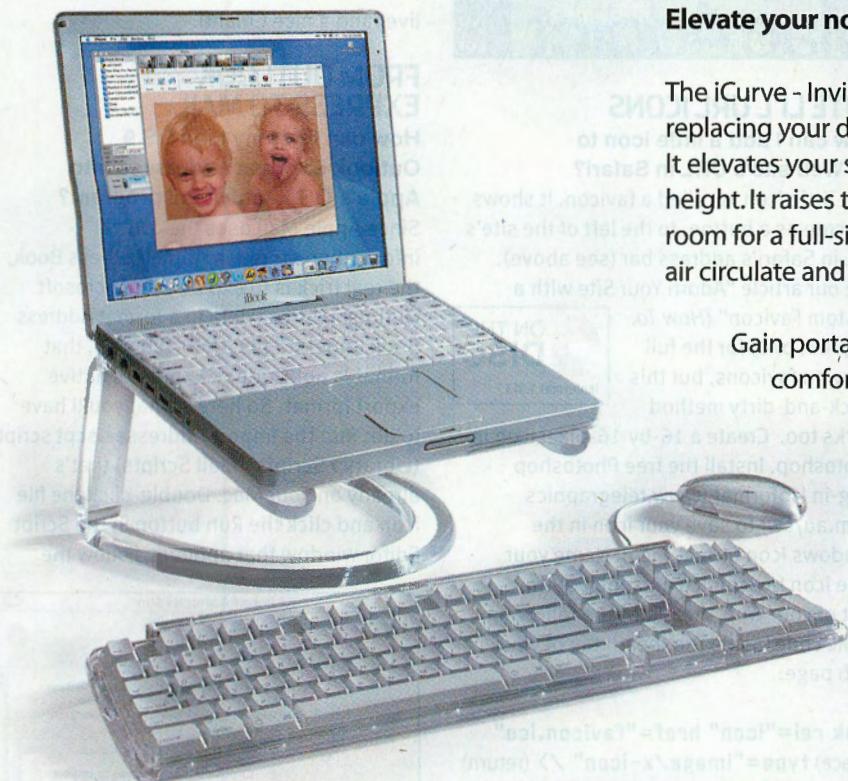
| | | | |
|--------------------------------|----------|-------------|--|
| LaCie d2 200GB FireWire 800 | \$469.00 | Jun/03, p47 | FireWire 800 speed meets solid-as-a-rock construction. |
| Maxtor Personal Storage 5000XT | \$399.99 | Feb/03, p44 | Solid construction, push-button backup, and 250GB. |
| OWC Mercury Elite 160GB | \$349.95 | Sep/02, p53 | This handsome, sturdy drive is whisper quiet. |
| TDK veloCD | \$315.99 | Jul/02, p54 | FireWire-equipped CD-RW drive is freaky fast. |

i wanna take you higher...

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Invisible Laptop Stand

JUST
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JUST
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CAN
HELP



PHOTOGRAPH COURTESY OF APPLE

AIRPORT EXTREME PRINTING

My Ethernet LAN gains Internet access through an Airport Extreme Base Station. Can I plug my USB printer straight into the Base Station for all computers to use?

Yes, all your wired and wirelessly connected computers will have access to the shared USB printer via the Airport Extreme Base Station's USB printer-sharing feature—provided that your Macs run Mac OS 10.2.3 (with Rendezvous support) or later and have the appropriate printer drivers installed.

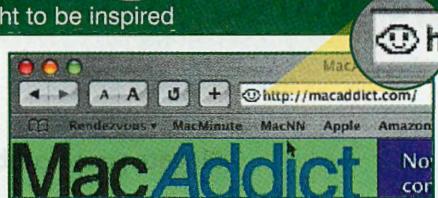
quick answers

TO QUICK QUESTIONS

VIEW STARTUP TEXT

What's Verbose mode?

Starting up Mac OS X in Verbose mode (hold down Command-V during startup) reveals the white-on-black text of the startup sequence during startup.

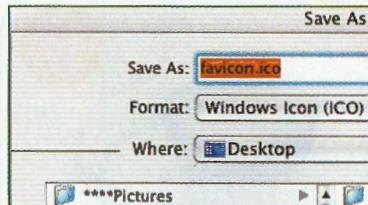


CUTE LI'L URL ICONS

How can I add a little icon to my Web site's URL in Safari?

That little icon is called a favicon. It shows up, cute as a button, to the left of the site's URL in Safari's address bar (see above). See our article "Adorn Your Site with a Custom Favicon" (*How To*, May/03, p70) for the full story on favicons, but this quick-and-dirty method works too. Create a 16-by-16-pixel icon in Photoshop. Install the free Photoshop plug-in Icoformat (www.telegraphics.com.au/sw) to save your icon in the Windows Icon format (.ico). Name your little icon favicon.ico and put it at the root of your Web site. Place the following HTML code inside the `<head>` tag of your Web page:

```
<link rel="icon" href="favicon.ico" type="image/x-icon" /> (return)
<link rel="shortcut icon" href="favicon.ico" type="image/x-icon" />
```



Use a Photoshop plug-in to save your favicon in Windows Icon (.ico) format.

ACCESS STARTUP TEXT

How can I view my Mac OS X's startup text without starting up in Verbose mode?

If you need to analyze your startup text after the fact, launch the Terminal (Applications > Utilities). Type `dmesg` and press Return. You'll get the information from your last startup.

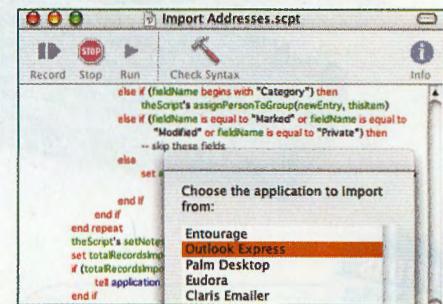
People browsing your Web site in Safari will now see your new favicon. We hear Hannibal Lecter takes his favicons with liver and a nice Chianti.

FROM OUTLOOK EXPRESS TO MAIL

How can I get my Mac OS 9

Outlook Express addresses into Apple's OS X-only Mail program?

Since Apple Mail uses the contact information stored in Apple Address Book, the real trick is to export your Microsoft Outlook Express data in a format Address Book understands. Unfortunately, that format is not Outlook Express's native export format. So here's what you'll have to do: Run the Import Addresses.sct script (Library > Scripts > Mail Scripts) that's already on your Mac. Double-click the file icon and click the Run button in the Script Editor window that appears. Follow the



Get those addresses out of Outlook Express and into Mail.

onscreen prompts to import all of your Outlook Express addresses into Address Book. This script also lets you import addresses from Microsoft Entourage, Palm Desktop, Qualcomm Eudora, Claris Emailer, and Netscape.



512MB is ideal for Mac OS X.

RULES ON RAM

How much RAM do I really need at home?

Get as much as you can afford, but here are some guidelines: For the average Mac OS X user, 128MB of RAM isn't enough, 256MB of RAM is sufficient, 512MB of RAM is ideal, and 1GB is great but not necessary unless you're running pro apps.

UNIX UNIVERSITY



REMOTE UPDATES

Can I run Software Update remotely via the command line?

Yes, use the softwareupdate command, which gives you a list (in text format) of all the available updates your Mac needs. To install one of the updates from the list, type **sudo softwareupdate item name**, replacing *item name* with the exact name of the update from the list. You'll need to enter your password, since softwareupdate needs to run as root to actually modify your operating system. This command is a great way to update remote computers or servers by logging into the computer via a telnet (SSH) session.

```
Software Update Tool
Copyright 2002 Apple Computer, Inc.

Software Update found the following new or updated software:
  - QuickTimeSU-6.1.1
    QuickTime (6.1.1), 19860K - restart required

To install an update, run this tool with the item name
  e.g. "softwareupdate <item> ..."
  [Home->X->] buch sudo softwareupdate QuickTimeSU-6.1.1
Password:
Software Update Tool
Copyright 2002 Apple Computer, Inc.

Downloading "QuickTime"... 100%
```

Update remotely via the command line.

GET YOUR HOTMAIL IN MAIL

How can I use Apple's Mail program to access my Hotmail account?

Use the open-source Mac OS X HTTP Mail Plug-in (<http://sourceforge.net/projects/httpmail-plugin>), which lets you configure Mac OS X's Mail to get email from a Hotmail account. Simply add a new account in the Accounts panel of Mail's Preference pane and



Use Mail to get your Hotmail. Choose **HTTP Mail** as Account Type. Enter your Hotmail email address, name, password, and incoming mail server (hotmail.com), and click the OK button. Now Mail will check your Hotmail account, and you won't even

SAFE BOOT

What is Safe Boot mode in Mac OS X?

Holding down the Shift key during startup invokes Safe Boot mode, which disables all non-Apple drivers and loads a minimal system. It's helpful for troubleshooting.



Safe Boot mode in Mac OS X is kind of like starting up in Mac OS 9 with extensions off.

RESTART WITH UNIX

Can you restart a computer or shut it down with Unix commands?

To shut down a computer from the command line, use the halt command. If you're not logged in as root, type **esudo halt**. To restart, use the reboot command.

MAC OS 9 RAM LIMITS

What is the RAM limit for a computer running Mac OS 9?

Mac OS 9 can only recognize and use up to 1.5GB of RAM.

This Month



60 Digitize Vinyl and Audiocassettes

Can't fathom dropping 15 bucks to bring your dusty old Iron Maiden record into the modern age? You don't have to if you digitize it yourself—we show you how to record vinyl and tape on your Mac. We also show you how to clean up those clicks, crackles, and pops.

64 Create a Super Video CD

We showed you how to create a Video CD in our April issue. Now find out how you can manufacture your own movies and get near-DVD quality from a CD-R that plays on most standard DVD players. We even show you how to design your own menu screens.



68 Play Dance Dance Revolution on a Mac

Admit it. You've watched those kids play that Dance Dance Revolution game at the mall and you secretly want to try it out yourself, but ye olde embarrassment factor keeps you from busting a move. No worries. We show you how to dance to that groove in the privacy of your own home, plus how to create your own steps.



Digitize Vinyl and Audiocassettes

by Kris Fong



WHAT YOU NEED

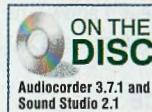
- Turntable with stereo receiver or preamp, and/or cassette deck
- Headphones or speakers (for monitoring)
- Records and/or audiocassettes
- Stereo RCA to 1/8-inch stereo miniplugin cable (about \$5 at electronics stores)
- USB audio-input device if your Mac lacks an audio input (Griffin's iMic, \$35, www.griffintechnology.com)
- Audio-recording app such as Black Cat Systems' Audiocorder (donationware, www.blackcatsystems.com) or Felt Tip Software's Sound Studio (\$49.99, www.felttip.com)

If you're too cheap to shell out \$9.99 for a digital download of one of your ancient records, then record your album yourself onto your Mac's hard drive.



We've spent a small fortune over the past 15 years, slowly replacing some of our favorite vinyl records and audiocassette tapes with their CD equivalents just so we could play the albums at work or on the go. But what about all

those old records and tapes that contain a single great song, or the ones that are out of print, or the ones we can't seem to justify buying again? Rather than wait for KTEL's next *Best of the Screamin'*

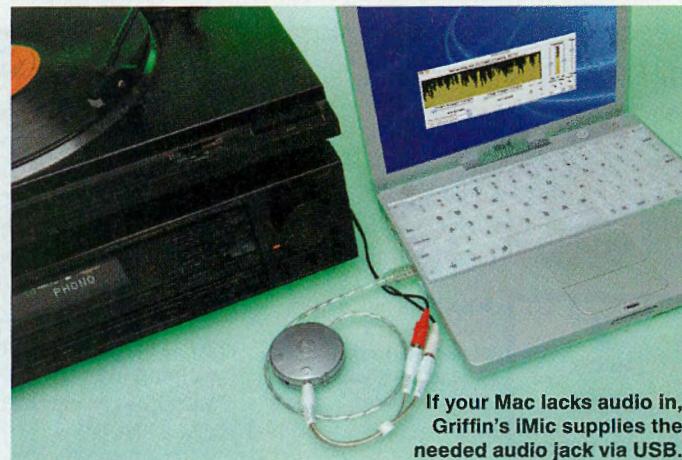


Audiocorder 3.7.1 and Sound Studio 2.1

'80s *Hair Bands* compilation, we can simply record our old albums and tapes on the Mac and burn the files onto CDs for play in the car or office, or use iTunes to convert them into MP3s for our iPod.

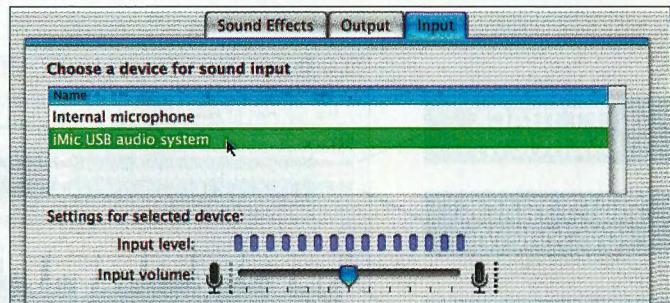
Digitizing analog recordings is easy, provided that you still have a turntable and/or cassette deck. If you're looking to turn your historic collection into CDs or MP3s, here's how. And for those interested in getting the best audio possible from a scratchy old record or hissy tape, we also show you how to clean up digital files.

1 Make the Connections If cassette dubbing is your task du jour, connect the audio cable's RCA connectors to your cassette deck's left and right audio-out jacks. If you're ripping vinyl, you can't connect your Mac directly to a turntable because you need a preamp to boost the signal to line level. Instead, hook up the turntable to your receiver as you normally would or to a preamp like Griffin's PowerWave (\$100, www.griffintechnology.com; see our review on p50) or a cheapie \$20 Radio Shack device. Then connect the audio cable's RCA connectors to the receiver's or preamp's left and right auxiliary, tape record, or similar audio out. Next, plug the stereo miniplugin into your Mac's audio-in jack. If your Mac lacks an audio in, you'll need a USB audio-input device to make the connection. Plug the USB device into your Mac's USB port, and then plug the audio cable's miniplugin into the USB device.



If your Mac lacks audio in, Griffin's iMic supplies the needed audio jack via USB.

2 Select Your Mac's Input To monitor the sound, either plug headphones into your cassette deck or stereo receiver, or connect a pair of speakers to your receiver. We don't recommend monitoring sound from your Mac due to possible latency (sound delay) problems—you could wind up chopping off a song's beginning. Set your Mac's input to record either from its sound input (if your Mac has an audio-in jack) or via a USB device. Classic users: From the Apple menu, select Control Panels > Sound. Click the Input tab and select the desired input from those displayed. OS X users: Select System Preferences from the Apple menu, and click Sound to display its preferences. Then click the Input tab and select the desired input from those displayed.



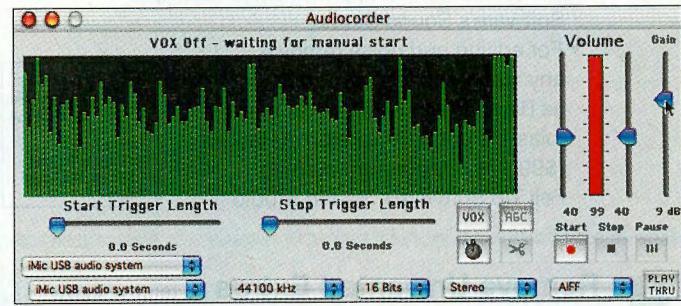
To get external audio into your Mac, choose the sound input for your setup in Preferences.

3 Establish Quality Control Stick a record on your turntable or a cassette in your deck, power everything up, and then launch your audio app. We used Black Cat Systems' Audiocorder—if you're not, apply these instructions to your own app. To get CD-quality audio, set your app to record 44.1KHz, 16-bit stereo sound in AIFF format—we selected 44100 kHz, 16 Bits, Stereo, and AIFF from Audiocorder's respective pop-up menus. To set the sound input, we also selected iMic USB Audio System from the pop-up menu under the Start Trigger Length slider (this automatically changes the pop-up underneath to the same selection). Choose your own input device from these pop-up menus.



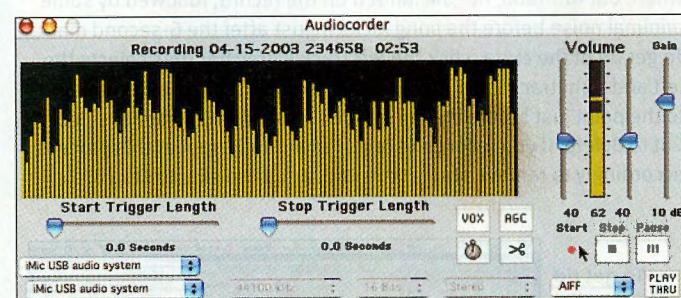
Because Audiocorder ignored our sound input preferences (other apps don't), we chose the iMic input manually from the pop-up menu.

4 Give It Some Gain To preview the volume level coming into your Mac, start playing your record or tape. Adjust the Gain slider so that the audio level is strong—the bar should dance predominantly in whatever level color the app supports (usually green, yellow, or both; Audiocorder displays green when previewing and yellow when recording), without going into the red, which will cause distortion. Don't set the gain too low or you may end up with a hissy recording.

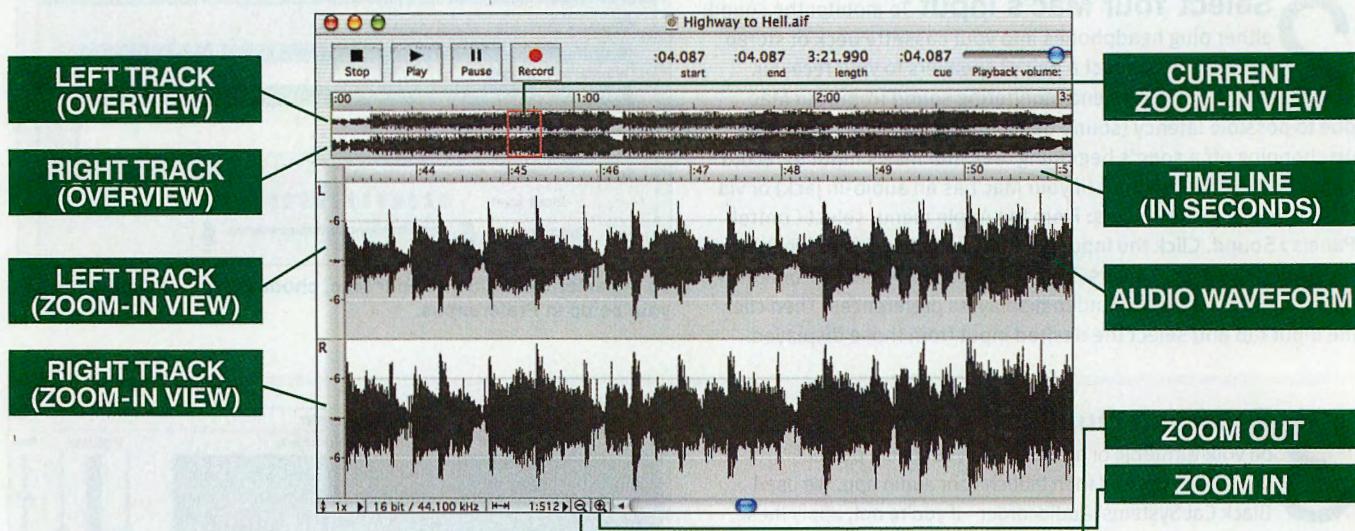


To prevent distortion, preview a bit of your album's volume level and take the Gain down a notch if the level spikes to red.

5 Ready, Set, Record You can record songs individually, or record an entire side of an album or cassette in one take and edit the file afterward. Cue up your first song, click Record in your audio app, and play the album or cassette. Keep an eye on the levels to make sure the audio doesn't peak to the red. If it does, stop recording, notch down the Gain a tad, and start again. When the song or side ends, click Stop, and then stop the song on your turntable or cassette deck. If the app doesn't save the file automatically, do so manually. Repeat for other songs. If you recorded songs individually and don't want to do cleanup work, you can burn these CD-ready files onto a CD-R as an audio CD, or use iTunes to convert them into MP3 files for play in iTunes or an MP3 player. If you need to do some editing, read on.



To digitize sound, just click Record, start playing your record or cassette, and keep an eye on those levels.



Clean Up Digitized Audio Files

by Kris Fong



WHAT YOU NEED

- For simple clip editing, any audio-editing app, such as Kumulipo's Jasmine (\$29.95, www.kumulipo.com), Apple's QuickTime Pro (\$29.95, www.apple.com), or Felt Tip Software's Sound Studio
- For editing and noise removal, any audio-filtering app, such as Bias's Peak (\$499, www.bias-inc.com), Arboretum's RayGun (\$99, www.arboretum.com), or Felt Tip Software's Sound Studio

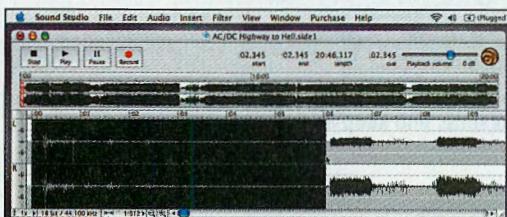


You've digitized your vinyl and tape collection, but your recordings sound more like a Rice Krispies jingle. While you should've thoroughly cleaned your records before taking them out for a spin, we won't make you redo the recording—you can't avoid a few clicks, crackles, and pops anyway. But you *can* clean up many minor noises and tape hiss after the fact.

Though you can't remove continuous noise without lowering sound quality, you can diminish it without making your music sound as if it were being piped in from a sewer. Here's how to do just that, as well as how to isolate individual songs from one collective recording and remove unwanted audio before and after a song. We used Sound Studio for everything—if you're not, just apply our instructions to your application of choice.

1 Remove Unwanted Extras To remove extra audio before a song, open the file in Sound Studio, click Play, and study the zoomed-in waveforms (bottom two tracks) as the playhead scrolls over them—the bigger the wave, the louder the sound. Silence appears as a straight, horizontal line. In our example, there are waveform spikes at the beginning where our turntable needle landed on the record, followed by some minimal noise before the song kicks in just after the 6-second mark. To get rid of the extra, click the left track's gray bar (this selects the left and right tracks simultaneously) and drag from the beginning to the point just before the song starts. From the Edit menu, select Cut to delete. If you recorded songs individually, repeat this process accordingly to remove stuff at the end, and then skip to step 3.

To get rid of a lengthy intro, just click and drag the waveforms to select and cut them.



2 Isolate Songs If you recorded your songs collectively, isolate the songs by chopping up the file. Using the waveform overview (top two tracks), click an area where the waveform flattens (picture the waveform as a sausage and look for the tie-off point). In the zoomed-in tracks, click the flat portion of the wave, and click Play to hear whether you indeed landed between two songs. If not, keep looking. If so, click the left track's gray bar anywhere within the break. From the Insert menu, select Marker. Seek out all other breaks and mark these as well. Then select Split By Markers from the Edit menu. In the resulting dialog, choose where you want your individual songs saved, and click OK. Rename these files by song title and remove unwanted audio before and after each song as you did in step 1.

Isolate songs from a collective recording by first marking the break points, and then splitting the clip at each marker.



3 Clean Out Clicks If you recorded from vinyl, your recording probably has a few clicks and pops in it. To get rid of these sounds, open a song in Sound Studio, click Play to listen, and click Stop when you hear a click or pop. The noise should appear as a spike in the waveform. To get rid of it, click the left track's gray bar just before the spike starts and drag to the point where it ends. Then select Interpolate (Repair) from the Filter menu to knock it out. To review your handiwork, click the wave before the repaired area, and then click Play. Repeat for all other pops and clicks.



Our cursor in the before shot points to a click; once we interpolate it, the noise disappears (after).

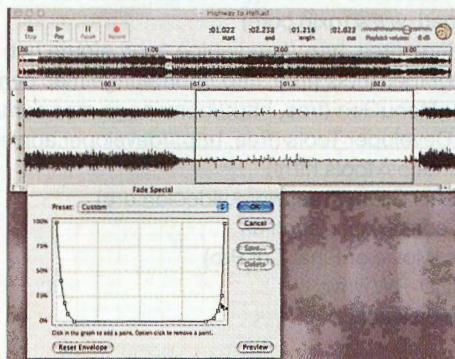
5 Lower Noise It's almost impossible to remove continuous crackles and hiss without sacrificing sound quality (unless you're a pro with a pro app). Expect to live with a bit of residual noise if you want your song to sound good. To diminish noise presence a bit, though, click the left track's gray bar anywhere and press Command-A to select all. From the Filter menu, select Graphic EQ, then 30-Band EQ to open the filter. Click Preview to start playing the song, and then experiment by selecting a high-frequency slider and notching it down to hear if it lessens the noise. Listen and experiment. Most hisses and crackles peak in the 10KHz to 12KHz range—start here, but listen carefully to sound quality, too. When you find a happy medium, click OK.

 Kris Fong is sorry to report that no amount of EQ will silence a hissing cat.

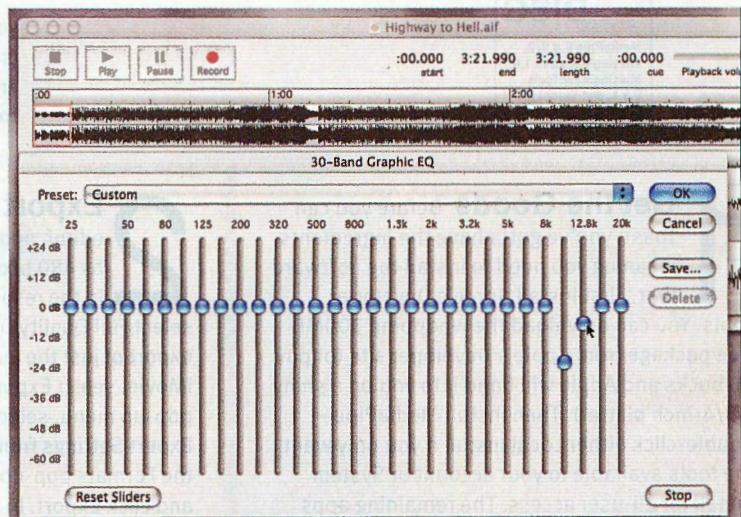
PREAMP PROBLEMS

If you're recording from a turntable-and-preamp combo instead of a turntable and stereo receiver, your music may sound like it was recorded in a tin can. This is because vinyl is recorded with reduced lower frequencies and boosted higher frequencies, known as the RIAA curve. This technology was an industry-standard way of getting better sound from and fitting more recording time on a record, while keeping the needle from jumping off it during play. Stereo receivers boost these frequencies back

4 Remove Crackle and Hiss from Silent Passages Removing noise that plays throughout a clip is difficult. Pro packages like Peak, along with expert audio-engineering skills, can yield good results, but there are quick-and-dirty methods. To get rid of crackling and hiss in a silent part of a song, highlight the affected area, and then select Fade Special from the Filter menu. In the resulting dialog, click Preview to hear the passage. Then click in the grid to draw a U shape so that the sound volume fades quickly at the start of the affected area, remains silent through it, and quickly returns to normal volume at the end. Click OK, click the waveform before the repaired spot, and click Play to review your work.



This area between guitar riffs should be silent, but it's not. Using the Fade Special filter, we dropped the volume on this spot.



We got rid of the severe crackle in our song by taking these two frequency sliders down a notch.

to normal levels when you play a record, but preamps won't. However, you can reintroduce and rebalance the frequencies in your digitized music by altering the EQ settings in your audio app.

One other turntable trouble spot: If you hear a low-frequency hum when you try to preview a record, you're hearing ground hum. This is caused when a preamp amplifies sound from an ungrounded device, such as your turntable. To get rid of it, just take your turntable's grounding wire and wrap it around the bottom prong of a three-prong plug (like the one on your power strip), and plug it into a grounded outlet.

Create a Super Video CD

by Andrew Tokuda



WHAT YOU NEED

- Mac OS 10.2 or later (\$129, www.apple.com)
- Roxio Toast 5.1.2 or later (\$99.95 boxed or \$89.95 download, www.roxio.com)
- MediaPipe (free, <http://mediapipe.sourceforge.net>)
- MissingMpegTools (free, <http://homepage.mac.com/rnc>)
- MissingMenuGen (free, <http://homepage.mac.com/rnc>)
- Apple Developer Tools (free, <http://developer.apple.com/tools/macosxtools.html>)
- VideoLAN Client (free, www.videolan.org)
- Video-editing app (such as Apple's iMovie or Final Cut Pro)
- CD-R/CD-RW drive
- Mondo disk space

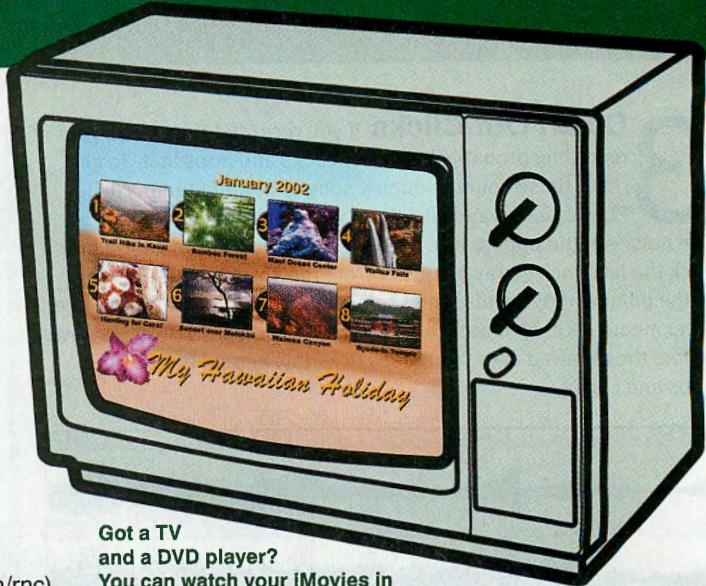


MediaPipe 0.8.9r2,
MissingMenuGen 1.0,
MissingMpegTools
0.9.1, and VideoLAN
Client 0.5.3

1 Get the Goods Before you can Toast, you've gotta have the ingredients, meaning you need to install the software first. First install Apple's Developer Tools. You can download the whopping 300MB free package from Apple's Developer site (or pay 20 bucks and Apple will hand it to you on a shiny 4 3/4-inch platter). Then install MediaPipe—double-click either Local Install if you only want the tools available to your account or System Install for all-user access. The remaining apps don't require installation.



MediaPipe offers two installers; choose Local for sole tool access or System for all-user access.

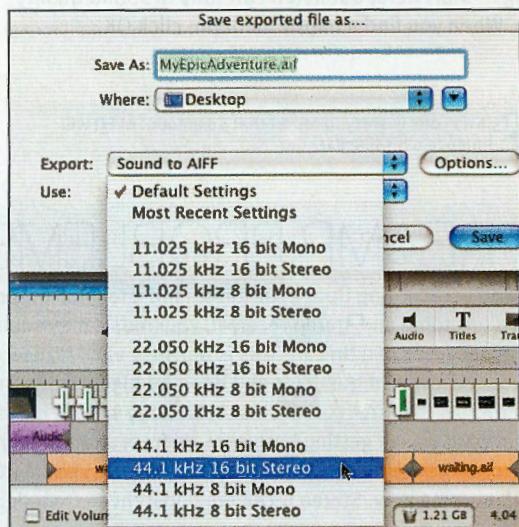


Got a TV
and a DVD player?
You can watch your iMovies in
near-DVD quality from a mere CD-R disc if
you create an SVCD.

We showed you in our April issue how to create a Video CD (or VCD) that allows you to play movies—housed on a CD—in most set-top DVD players. If you don't have a DVD burner, VCDs are a relatively cheap and convenient way of sharing your digital movies with those who don't have a computer—and a narcissistic way of fawning over yourself on TV. The downer is that you have to deal with a VCD's VHS-like quality. Or do you?

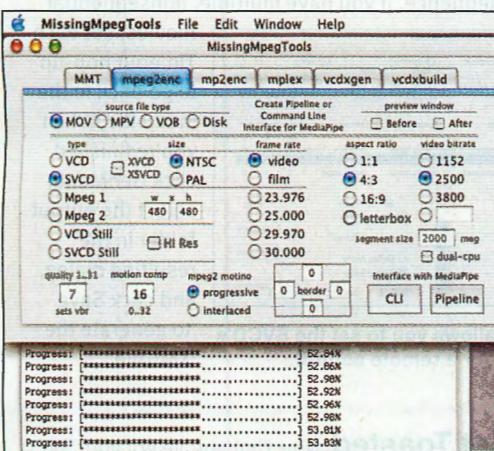
If you're willing to put a little extra muscle into your efforts, you can get near-DVD-quality video on a regular CD-R by creating a Super Video CD. It won't cost you a penny more than creating a regular VCD, since most of the required software is free and you likely have the rest. Here's how to make one.

2 Export Video and Audio Open the movie in your video editor, and export it (or its first chapter) in high-quality DV format at 720 by 480 pixels. To do this in iMovie, select Export from the File menu. In the resulting dialog, choose To QuickTime from the Export pop-up, select Full Quality DV from the Formats pop-up, and click Export. Do a second export of just the audio track, saving it as a 16-bit, 44.1KHz stereo AIFF file. In iMovie, select Export from the File menu, select To QuickTime from the Export pop-up menu, select Expert Settings from the Formats pop-up, and click Export. In the resulting dialog, choose Sound To AIFF from the Export pop-up, select 44.1KHz 16-bit Stereo from the Use pop-up, and click Save.



If you're using iMovie, export just the audio tracks by selecting Sound To AIFF from the Export pop-up in Expert Settings.

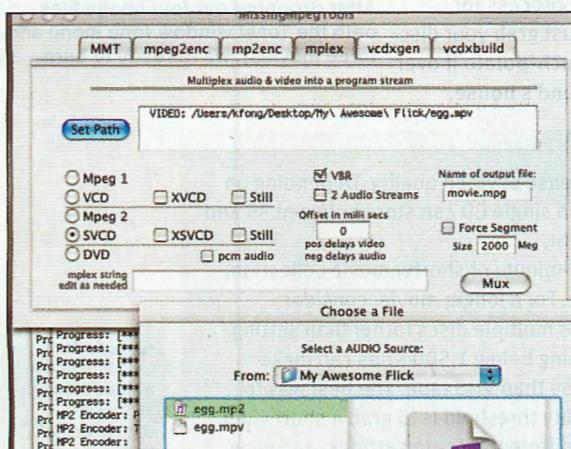
3 Encode Video to MPEG-2 Launch MissingMpegTools and click the Mpeg2enc tab. In the panel, click the MOV radio button, and in the resulting dialog, select your exported DV movie, and then click Choose. Another dialog pops up, asking you to select an output folder. Select a folder or create a new one to store your encoded files, and then click Choose. Leave the default settings unless your movie is wide-screen format (if so, select the 16:9 radio button) or you live in Europe (select the PAL radio button). If you have a dual-processor Mac, check the Dual-CPU box to speed things up. Then click CLI; the Terminal launches and gobs of gibberish run across the window during the encoding process.



This can take a loooong time. Be patient. This might be a good time for lunch. Once you see the message "done!" followed by the Terminal prompt, it's finished.

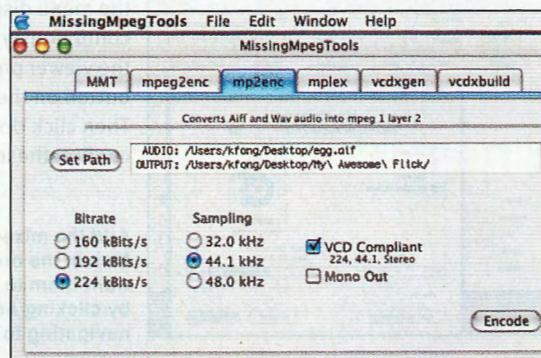
20 minutes later, the Terminal shows that our video encoding is only a little more than halfway done—and this is a 3-minute clip!

5 Mux the Media You now have an MPEG-encoded video (MPV) and audio (MP2) file that you need to merge. This process is called *multiplexing*, or *muxing*. Click the Mplex tab, then click Set Path. In the resulting dialog, select the MPV file and click Choose. In the subsequent dialog, select the MP2 file and click Choose. In the next dialog, click Choose to select your current output folder. In the Name Of Output File field, name your movie, keeping the .mpg extension; leave the default settings. Then click the Mux button to fuse the files. If you have more videos, encode and mux each of them in sequential order. Keep in mind that an SVCD holds about 45 minutes of average-quality video (see "Quality Control," p66). To preview your muxed video, play the MPEG file in VideoLAN Client.



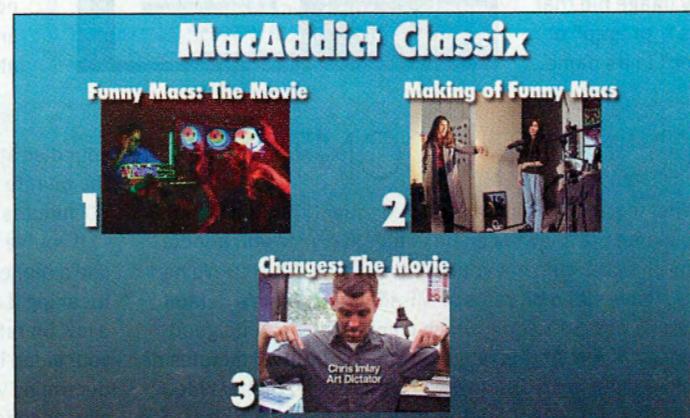
The multiplex section launches a series of dialogs where you choose a video and an audio file for fusion.

4 Encode Audio to MP2 Next, convert your AIFF file into an MPEG-1 Layer 2 (MP2) file. Click the Mp3enc tab, click Set Path, select your exported AIFF in the resulting dialog, and click Choose. In the subsequent dialog, select the same output folder you used for your video, and click Choose. Leave the default settings, but make sure the VCD Compliant box is checked. Then click Encode to start the Terminal process for the audio section.



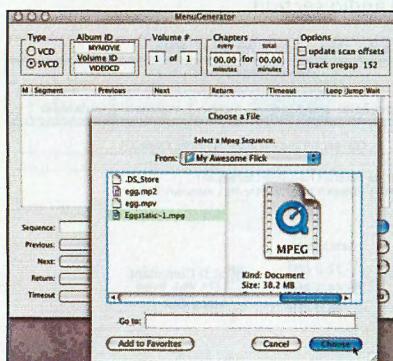
Encoding AIFF audio to MP2 is a process similar to encoding video—and just as boring to watch.

6 Make the Menu If you've got multiple videos, a menu is key for navigation. Because the user will navigate SVCD movie sequences via the numbers on a DVD player's remote control, add a numeric reference to each movie thumbnail in your menu. For menu-creation instructions, see "Create a Static SVCD Menu," p67. Your graphic should include numbered and titled thumbnails to represent each movie clip. Save the file as a TIFF or JPEG, import it into your video editor, and export the file as a two-frame DV-format movie. Launch MissingMpegTools, click the Mpeg2enc tab, and click the SVCD Still radio button. Click the MOV radio button, choose your menu movie file and output folder in the dialogs, and click CLI to encode the file. Click the Mplex tab, check the Still box in the Mpeg 2 section, click Set Path, and select the menu MPV and output folder in the dialogs. Name your menu file in the Name Of Output File field, and click Mux to create the MPEG.



We created this menu graphic, which displays numbered thumbnails of our videos, and then encoded it for SVCD compatibility.

7 Order the Items Although MissingMpegTools can generate XML files—the SVCD building block—MissingMenuGen offers better navigation. Launch MissingMenuGen and click Add. In the resulting dialog, select your menu MPEG file and click Choose. Click Add again, select the movie MPEG file that should play first in your sequence, and click Choose. Continue adding movie MPEGs in the order you want them to appear on your SVCD. When you're finished, click the first entry in the window (your menu), and select the Set As Menu radio button. Set the Loop field to 0 (zero)

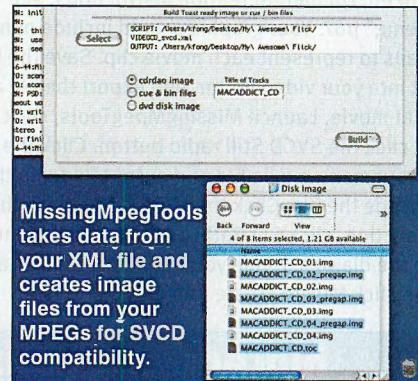


Times, which makes the menu display continuously until the viewer presses a button on the remote. Then click Update to confirm these settings.

Add the mixed MPEG files in the order you want them to appear by clicking Add, then navigating to each file.

9 Build the SVCD To make menu and movie files viewable on an SVCD, you need to turn your work into image files. Launch MissingMpegTools and click the Vcdxbuil tab. Select the Cdrdao Image radio button, then click Select. In the resulting dialog, select the XML file and click Choose. In the subsequent dialog, select the output folder and click Choose. Name your collection in the Title Of Tracks field and click Build.

The Terminal once again displays the process as your menu and movies get converted into image files (with the extension .img). When it's finished, open your output folder and delete any image file that has “_pregap” or “.toc” in its name.



MissingMpegTools takes data from your XML file and creates image files from your MPEGs for SVCD compatibility.

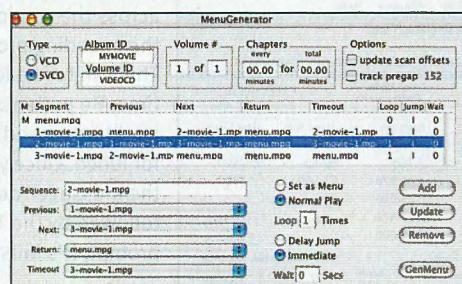
QUALITY CONTROL

What matters to you more, size or quality? When it comes to video, the answer can be subjective once you ponder the choices—and get your mind out of the gutter. We had you leave video bit rates at MissingMpegTools's default setting of 2,500 Kbps, which compresses DV into good-quality video. At this rate, you can fit about 45 minutes of MPEG video on a CD. However, you can set higher video bit rates, which yield better quality at bigger file sizes. Set a lower bit rate, and you can cram more movie minutes on

your disc at the expense of video quality. Depending on the bit rate you set, a single CD can store between 35 and 70 minutes of content.

If you've got a 30-minute or shorter movie collection, use a higher bit rate. For a longer movie, consider breaking it up across multiple discs rather than setting a low bit rate; anything below 1,500 Kbps can make your video look worse than VHS tape. The best way to determine your quality threshold is to grab a short video clip, encode it with different bit-rate settings, and view them all.

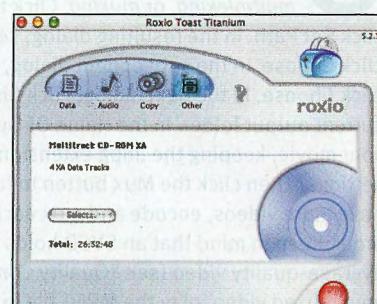
8 Map Out the Navigation Select the first movie file in the list. At the bottom of the window, use the Previous, Next, and Return pop-up menus to assign which movie file to play when the viewer presses the previous, next, and return buttons on a remote control. For example, assign the Next pop-up to play the next movie in the sequence. Use the Timeout pop-up to assign which movie to play automatically when the current one ends. Click Update after setting a movie's navigation but before selecting the next. Repeat for remaining files. If your movie is divided into chapters, set each Timeout pop-up to play the next movie in the sequence. If you have multiple, nonsequential movies, set each Timeout pop-up to go back to the menu file. When you're finished, click GenMenu, select the output folder in the resulting dialog, and click Save to generate the XML file.



MissingMenuGen allows you to set the SVCD's navigation control for a remote control.

10 Get Toasted Now that you've got your SVCD in virtual format, it's time to burn it for posterity. Launch Toast; in the window, click Other and select Multitrack CD-ROM XA from the drop-down menu.

From your output folder, drag all the image files into the Toast window in order. Then click Record to burn your disc. When Toast chimes to tell you it's done, fire up your TV and DVD player, stick the disc in, pop some corn, sink into your La-Z-Boy, and enjoy the show. Most newer DVD players can play SVCDs, but some older ones may not. If you can't play your creation, don't rant and rave about going through this entire process for nothing. Just grab your disc and go couch-potato it over at your friend's house.



After dropping our four image files onto the Toast window (one menu and three movies), we're ready to burn.

 Andrew Tokuda is a video producer at 3rd Light Digital Media—that means he gets to play with really cool toys.

Create a Static SVCD Menu

by Kris Fong



WHAT YOU NEED

- Any image editor
- Any video editor

You've spent a good amount of time shooting your video and editing it, so what's one more task? Sure, you can stick all your movies onto an SVCD without a menu; the movies will play in sequential order. But if you want to give viewers the choice of skipping to the good parts in your indie movie, or choosing which movie to view from your grab bag of clips, a menu is in order. Here's how to create a still image menu. We used Photoshop, but you can apply our instructions to your own image editor.



GraphicConverter 4.6 and Montage 1.1 demo



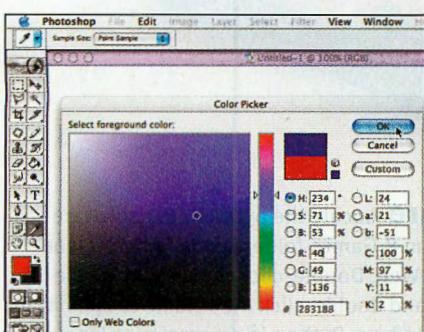
Summer 2003
The Great Global Odyssey

Wanna help viewers navigate through your SVCD when they play it in their DVD player? Create a menu.

1 Create the Backdrop Your videos are 720 by 480 pixels. Your menu should be likewise—unless you edit video in iMovie, in which case create a new document 720 pixels wide by 540 pixels high. If you edit video in a higher-end editor (meaning anything but iMovie), create a new 720-by-480-pixel document. Then give your menu a background color; click the foreground color swatch in the tool palette, choose a color, select the paint bucket tool, and click the

canvas. Alternatively, you can paste in any image to serve as a menu background, as we did.

To create a solid menu background, choose any color from the Color Picker.



3 Throw In Thumbnails To create thumbnail images, take a screenshot (Shift-Command-3) of one of your movies. Open the shot in your image editor and crop around the movie image. Repeat for other clips. If you've got lots of movies, size down each thumbnail accordingly so everything will fit in the menu. To add a thumbnail, open the image, copy it, and paste it in the

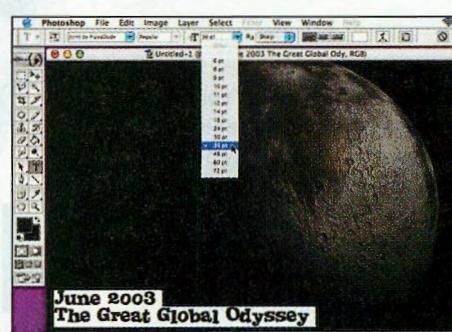
menu graphic. To resize a thumbnail, choose its layer in the Layers palette and from the Edit menu, select Transform, then Scale. Hold down the Shift key and drag any bounding-box corner to resize. Double-click inside the box to set the change.



Depending on the number of movie sequences you have, scale your thumbnails to fit them all.

2 Add a Title Let your viewers know what they're watching by giving your SVCD a title. Select the text tool, choose a font and size from the respective pop-up menus in the tool options palette, and then select a text color (one that stands out from your background) from the color swatch. Click inside the canvas and type a title. Use the move tool to place it. If you want to change your font and/or size choice, select the text tool, highlight the text on the canvas, and choose

different options from the pop-up menus.



If you don't like the font or size you started with, just highlight your title and experiment with choices afterwards.

4 Add Numbers and Text Use the text tool to add a number and title to each movie thumbnail. Remember which number you give each movie, as this number will dictate the order in which you encode and build your SVCD. When you're finished, flatten all layers, save the file as a JPEG or TIFF image, import the file into your video editor, and create two frames (iMovie users should drag the clip to the timeline, press the right-arrow key twice, select Split Video Clip At Playhead from the Edit menu, and delete the second clip in the timeline). Then export the file as a High Quality DV movie.



Because SVCDs require viewers to punch numbers on their remotes to jump around sequences, do them a favor and supply the reference.



Kris Fong is an editor at *MacAddict* magazine—that means she gets to play (giggle) really cool, uh, words.

Play Dance Dance Revolution on a Mac

by Chris Barylick

EASY

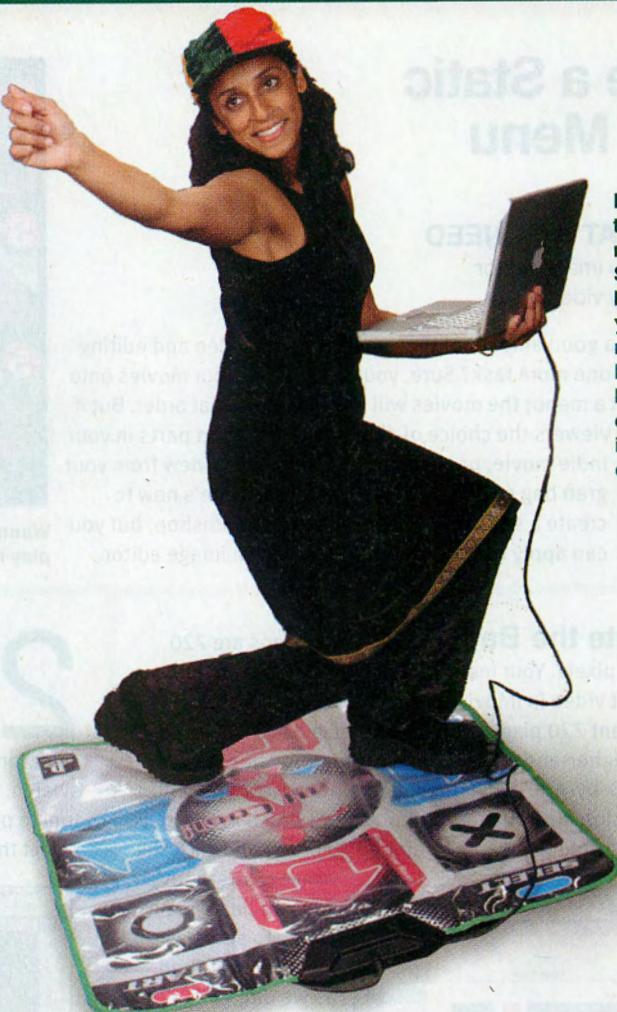
WHAT YOU NEED

- USB-equipped 400MHz G3 or faster
- Mac OS 10.2 or later
- pyDDR 0.6.2 or later (free, <http://icculus.org/pyddr>)
- Sony PlayStation-compatible dance pads (\$15 to \$25)
- PlayStation-to-USB adapter (about \$15)

This summer, you can dance in front of your Mac and be regarded as completely sane. Dance Dance Revolution is a massively popular interactive dancing game where players engage in some fancy footwork, dictated by the onscreen step arrow sequence, with the goal of outdancing their opponent. The game used to be exclusive to the Sony PlayStation and arcade units, but thanks to some determined programmers, you can now play the game on a Mac—and it's free.

The open-source version—pyDDR—was ported from Linux to the Mac by a team who made sure its game remained true to the original. Players select a song and dance to it, matching the highlighted arrows they see scrolling up the screen with footsteps on the dance pad's corresponding arrows—kind of like Simon-meets-karaoke. The more accurate your steps, the higher your score—if you've got two left feet or no sense of rhythm, it'll cost ya. Dance alone or against another player simultaneously.

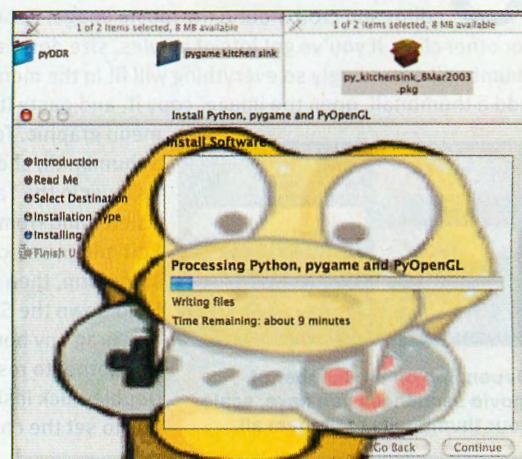
Though you can play the game using your Mac's keyboard, you'll have a heckuva lot more fun if you get a PlayStation-compatible dance pad and a PlayStation-to-USB adapter to play the game for real. So if you aspire to be the next badass beat breaker on the DDR scene but fear showcasing your inexperienced moves in the presence of other mall rats, here's a great way to practice and play in the privacy of your own home.



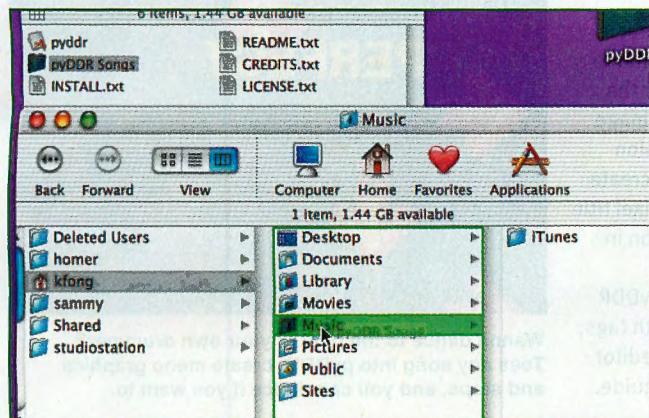
If your dance technique resembles Seinfeld's Elaine Benes, you can now play Dance Dance Revolution on your Mac in the privacy of your home.

1 Install the Software Locate the pyDDR 0.6.2 software on the Disc (find it in the Fun & Games folder inside Software), or download the file from the Web. Double-click the disk image file to mount it on your desktop, and double-click the volume to open it. To run the game on a Mac, you need to have Python (a programming language) and other utilities installed. Luckily, the developers put all the necessary components and the game into one global installer. Just open the Pygame Kitchen Sink folder and double-click the PKG file inside to run the installer (you need to have administrator privileges to install the software).

Double-click the PKG file to launch the installer, which installs the game and all necessary components onto your Mac.



2 Put Stuff Where It Belongs Once you've installed the game, locate the pyDDR folder at the root of the pyDDR 0.6.2 disk-image volume—this folder holds the game's executable files. Copy the entire folder onto your desktop, and then open it (the hard disk version—not the disk image). Inside, you'll find a folder called pyDDR Songs, which (not surprisingly) contains the song files and data for the game. However, you need to move the folder to your user's Music folder (the same one that holds your iTunes stuff) to run the game properly. Double-click your hard drive icon to open it, and then click the Home icon to display your user folder. Drag the pyDDR Songs folder to your user's Music folder.



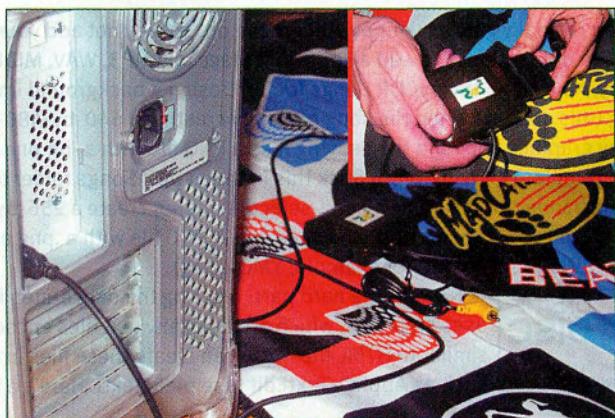
To get songs to play in the game, move the pyDDR Songs folder to your Music folder.

4 Go Dance OK, let's dance! Open the pyDDR folder on your desktop and double-click the pyDDR app to launch the game. pyDDR should automatically sense your hardware setup and display a menu screen from which you can choose a song—the game comes with three original songs, but you can add your own music and dance steps (see "Create Your Own Dance Steps," p70). Step onto the dance pad, use its buttons like those of an ordinary controller to navigate the menus and make selections—and dance, dance, dance!



Use the buttons on the dance pad to navigate the game's menus, select a song, and start boogying!

3 Attach the Pads While pyDDR is free to all, you need to buy or borrow a set of PlayStation-compatible dance pads and an adapter—unless you'd rather hunt-and-peck your way through the game, which really isn't that fun. (For hardware purchasing information, see "Where to Buy," below.) Attach the USB end of the PlayStation-to-USB adapter to one of your Mac's USB ports (feel free to attach it to a USB hub port or one of your keyboard's USB ports—it won't hinder performance). Then plug the dance pad's connector into the adapter's hub (the square part) and you're done. If you have two pads, an adapter from Level Six allows you to plug both in.



Connecting the pads to your Mac is a simple plug-and-play affair.

WHERE TO BUY

If you're looking to do more than finger-dance atop your Mac keyboard, you need a PlayStation-compatible dance pad (or a pair for two-player challenges) and a PlayStation-to-USB adapter. You'll find dance pads in just about any store that stocks video games, including Best Buy, CompUSA, Fry's, Electronics Boutique, Wal-Mart, and Target, as well as online. Depending on the manufacturer and design, prepare to pay between \$15 and \$25 per pad.

A PlayStation-to-USB adapter may be more difficult to find. Although you can find one at Radio Shack, the pyDDR developers strongly recommend that you order one from Level Six (\$14.95, www.levelsix.com/products/pc/EMSUSB2.shtml)—it allows you to connect two dance pads simultaneously, and it doesn't require any additional futzing.



Here's what a basic dance pad looks like.



This adapter lets you connect any PlayStation control device to your Mac via USB.

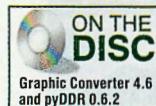
Create Your Own Dance Steps

WHAT YOU NEED

- Mac OS 10.2 or later (\$129, www.apple.com)
- pyDDR 0.6.2 or later (free, <http://icculus.org/pyddr>)
- Text editor, such as TextEdit (built into Mac OS X)
- Graphics app, such as Adobe Photoshop (\$609, www.adobe.com) or Lemke Software's GraphicConverter (\$30, www.lemkesoft.com)

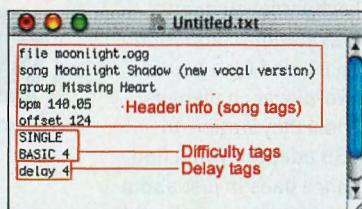
You're finally getting your pyDDR groove on, so why not add your own music and dance steps? To add a song, just place any MP3, WAV, MIDI, or OGG file (sorry, no AAC) in the pyDDR Songs folder. Design a background image for the song (this appears when the song plays) by creating a 640-by-480-pixel image in any graphics app, and then saving it as a PNG file with a .bg.png extension (for example, YMCA-bg.png). Stick this in the pyDDR Songs folder too. To create a song banner for the game's song-selection menu, create a 256-by-80-pixel title graphic in your graphics app, and save it as a PNG file with a .png extension in the pyDDR Songs folder (for example, YMCA.png).

Now for the hard part: creating the dance-step files. pyDDR uses step files, which are basically text files encoded with tags, similar to HTML files. You can create these files in a text editor such as Apple's TextEdit (use plain text). Here's a basic guide.



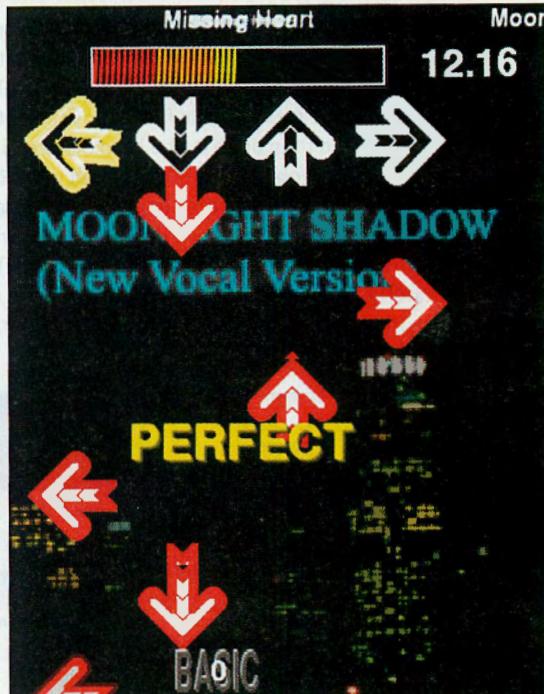
Graphic Converter 4.6
and pyDDR 0.6.2

1 Define the Song Characteristics Create a new plain-text document and type *file* followed by the song's exact file name and extension in the first line (for example, *file YMCA.mp3*). In the next line, type *song*, then the song title. In the next line, type *group*, then the artist's name. The next line tells pyDDR how fast the song plays in beats per minute (bpm). Type *bpm* followed by a number (to figure out a song's bpm, try using a metronome or executing pyDDR's *findbpm* file via the Terminal). Offset makes up for any silent delay (in milliseconds) that may occur between the file's start and when the song actually kicks in—type *offset* and a value (for example, typing *offset 500* compensates for a half-second delay). Type the gameplay mode—*SINGLE* or *DOUBLE*—on the next line. On the line after that, you'll set the difficulty level and how fast the arrows scroll upward. Type *BASIC*, *TRICK*, or *MANIAC*, and add a number to complete the tag. On the next line, type *delay*, followed by the number of seconds to wait before playing the song file.



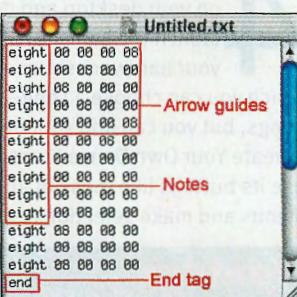
Start the step file by writing the song and timing tag info first. Thankfully, writing step code is pretty simple.

3 Test Out Your Steps To finish off the instructions, type *end* on a new line after completing the last step-file command, save the file with the song name and a .step extension (YMCA.step, for instance), and drop it in the pyDDR Songs folder. Then launch pyDDR and put your feet to the test. If you find that some of your steps are off rhythmically, you may need to edit your step file until everything grooves to that funky beat and your steps run through to the end of the song.



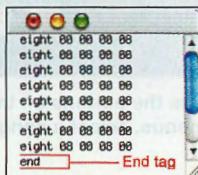
Wanna dance to the beat of your own drummer? Toss any song into pyDDR, create menu graphics and steps, and you can dance if you want to.

2 Create the Steps Next, define where a player needs to step. Each command starts with a note that determines the timing, followed by an arrow guide tag—a numerical code that determines which arrow appears. Assign notes with these commands: *whole* (creates a whole note, or a beat with three beats of silence), *halfn* (creates a half note, or two beats), *quatr* (creates a quarter note, or one beat), *eight* (creates an eighth note, or half a beat), or *steps* (creates a sixteenth note, or a quarter of a beat). Assign arrows with these codes: left arrow—08 00 00 00, down arrow—00 08 00 00, up arrow—00 00 08 00, or right arrow—00 00 00 08. You can also make a player step on two arrows at once. For example, typing *quatr 08 00 00 08* challenges the player to hit both the left and right arrows simultaneously on one beat. There's no set way to write steps—take a good listen to your song and be aware of the beat, time changes, and mood of the piece.



To create a step, type a note to define the timing then type an arrow tag to dictate which arrow to assign to the step.

Start the step file by writing the song and timing tag info first. Thankfully, writing step code is pretty simple.



To finish, type *end*.

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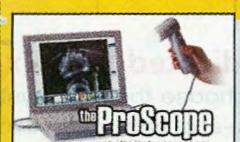
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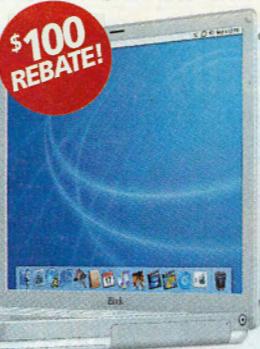
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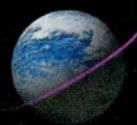
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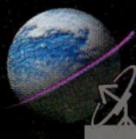


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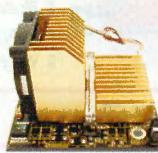
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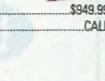
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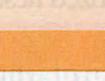
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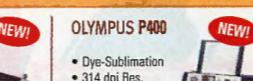
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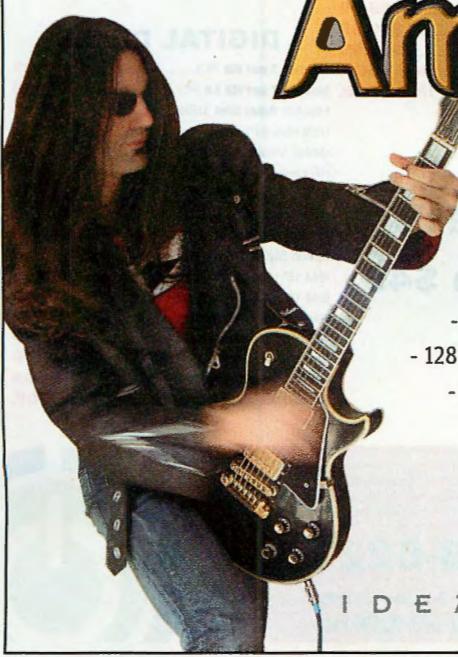
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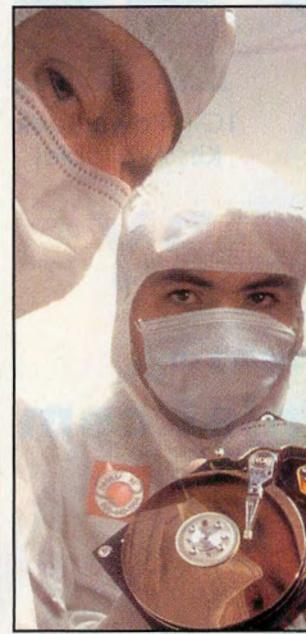
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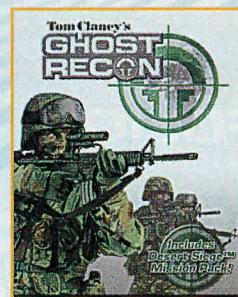
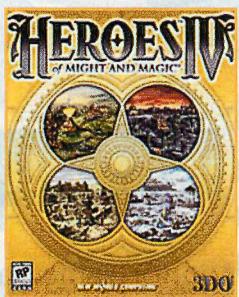
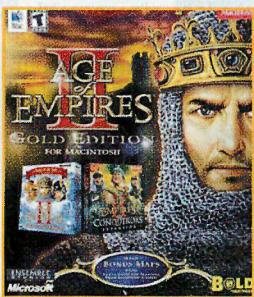
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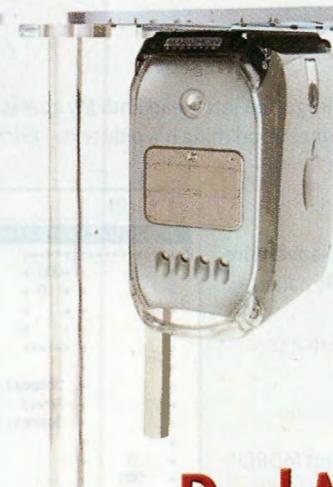
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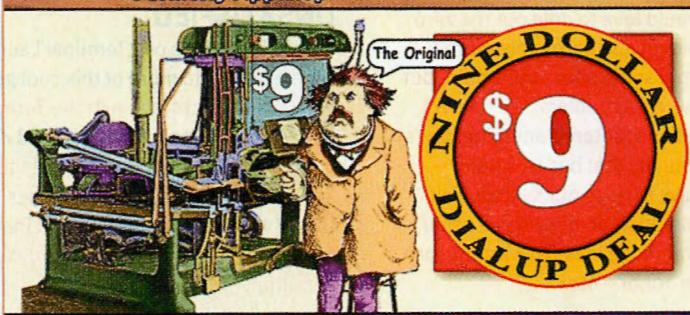
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LETTERS

SPIDEY'S PAPER BAG

In your article "The Next Level" (May/03, p34), you show a picture of Spider-Man in a blue getup with a bag over his head. Here's why he's wearing it:



It would really suck to run into Mary Jane dressed like this.

The Fantastic Four managed to remove his alien costume and contain the creature. For the trip back, they loaned Spidey an old blue FF suit and a paper bag for his head so he wouldn't have to swing home naked and reveal his secret identity.—*Mark*

Good thing the Fantastic Four chooses paper over plastic at the supermarket.—*Max*

ZERO TO HERO

I think your magazine is awesome, but whatever happened to that zero-widget rating you said you were going to use?—*Danny Soto*

The sadistic editors over here would love to dole out the zero widget and garner pleasure from some poor soul's pain, but there's a problem. We haven't yet encountered anything that's actually that bad. It would have to hose our system, self-combust, or make some other grandiose mess to warrant such an honor.—*Max*

FUN WITH FINK

Thanks to your April 2003 Disc, I am now experimenting with Phil Lavigna's "Fun with Fink" tutorial to install Fink, the package manager for installing Unix apps in Mac OS X. I never would have attempted to do this, but these step-by-step instructions got me up and running.—*Mark Marin*

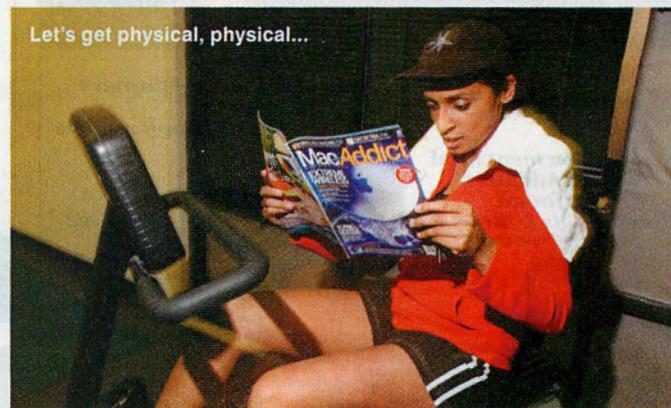
Congratulations!—*Max*

SUPERSWEAT

I sweat easily, so I was disappointed to discover that the sweat dripping from my forehead as I read your magazine makes the ink run right off the page. Would it be so much more expensive to use waterfast ink?—*Alex Ford*

Jeez, Alex, what are you secreting? We sent *MacAddict* editor Narasu Rebba Pragada

Let's get physical, physical...



PHOTOGRAPH BY MARK MADDO

down to the gym for some sweat testing (see above), and our sportproof ink hung on.—*Max*

SIMS GEEK PARTY

For the game The Sims: House Party, I created new character skins with USB and FireWire logos on their shirts. The skins are compressed into a StuffIt file on my iDisk public Web page (www.homepage.mac.com/ibook238/FileSharing2.html) if anyone wants them.

—*Steven Matarazzo*

Aw, look at those two (see below). As my great-granny Maxine once said, there's a seat for every ass, and she wasn't referring to that animal magnetism in that sofa.—*Max*



Yeow, that's hot.

LAUGHTER IS THE BEST MEDICINE

The "Terminal Laughter" section of our "Access Your Mac with the Terminal" how-to (Mar/03, p62) really got your attention.

TERMINAL GAMER

I never knew text-only games were so exhilarating. I've really gotten into Dead End. My goal is to find some way to get past that ferocious bear that keeps eating me. Good thing it's only text.—*Erica*

Yeah, text-based mailings are far less stressful than the GUI kind.—*Max*

WHO DUNNET?

In your March 2003 issue, you refer to a command-line text-adventure game as Dead End. Just to let you know, the game is actually called Dunnet. I should know, I am the author.—*Ron Schnell*

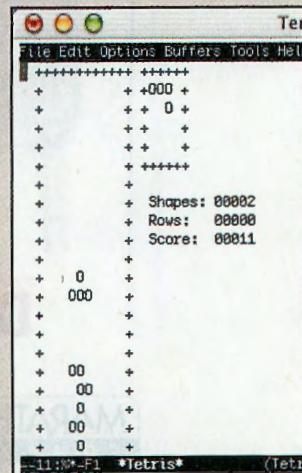
Thanks for the correction. Any hints for that bear problem Erica (see above) is having?—*Max*

UNSATISFIED

I loved the article on "Terminal Laughter." I want more! I Want MORE!! Where I can find more of this cool geek stuff?—*Felipe Mari*

All right, all right. Launch the Terminal, and type the following:

ls /usr/share/emacs/21.1/lisp/play. This will produce a list of text-based game scripts already installed on your Mac. Type **emacs** to launch the emacs text editor, then press Escape, then X to get to the menu bar. Finally, type in the name of the script (minus the .el or .elc extension). You're ready to play games in the Terminal.—*Max*

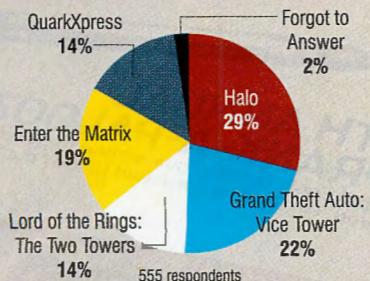
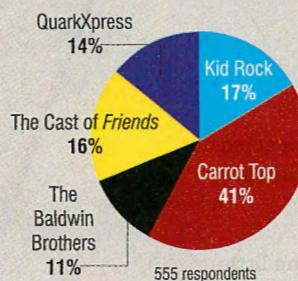


Play Tetris in the Terminal.

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SURVEY SAYS**Which would you most like to see ported to the Mac?****Which would you most like to see deported?****MacAddict
READER
POLL**

Q What rumored Apple product has the best chance of becoming a real product?

- iPhone
- Power Mac G5
- Tablet Mac
- Apple PDA

Q What comic-book character (or duo) is most in need of his or her (or their) own major motion picture?

- Wonder Twins
- Wonder Woman
- Garfield
- Calvin and Hobbes

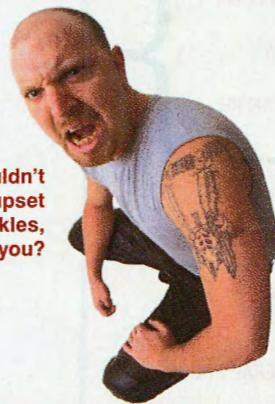
To answer, click Reader Poll at www.macaddict.com before June 10, 2003. See the September 2003 issue for the results. Check www.macaddict.com for a new poll each month.

NO CONTEST

Why are your contests void in Arizona?

—Nathan "Sinclair" Joslin

Our lawyer (let's call him Chuckles) tells us that certain states, like Arizona, have laws regarding games of skill that prevent us from running our contests without submitting complex documentation.—Max



You wouldn't want to upset Chuckles, would you?

WINNER!**Burning Questions
Contest Results**

Thanks to **Alexander White** for submitting the best five things to do with the time saved from using a faster CD burner. He wins a LaCie d2 FireWire CD-RW (\$199, www.lacie.com). The overall five best answers (taken from a variety of entries) were:

1. Daisy-chain my cats together to form a Super Cat.
2. Make love to my wife.
3. Exfoliate, exfoliate, exfoliate.
4. Work out more to reshape my "computer butt."
5. Mix up supermarket jellybeans so people think they're getting cherry but they're really getting cinnamon.

NEXT MONTH→ **50 BUGS SQUASHED**

Don't miss our expert advice in our third-annual bug-destruction guide.

→ **INTERNET SERVICES COMPARED**

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ENTRY FORM

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Contest Rules

The judges will be MacAddict editors, and they will base their decision on 50 percent humor and 50 percent creativity. All entries must be received no later than July 31, 2003, with the winner announced around November 2003. By entering this contest, you agree that Future Network USA may use your name, likeness, and Web site for promotional purposes without further payment. All prizes will be awarded and no minimum number of entries is required. Prizes won by minors will be awarded to their parents or legal guardians. Future Network USA is not responsible for damages or expenses the winners might incur as a result of this contest or the receipt of a prize, and winners are responsible for income taxes based on the value of the prize received. A list of winners may also be obtained by sending a stamped, self-addressed envelope to Future Network USA c/o MacAddict contest, 150 North Hill Dr, Brisbane, CA 94005. This contest is limited to residents of the United States. No purchase necessary; void in Arizona, Maryland, Vermont, Puerto Rico, and where prohibited by law.

THINGS FALL APART

MacAddict Structural Integrity Compromised in Health-Club Sauna

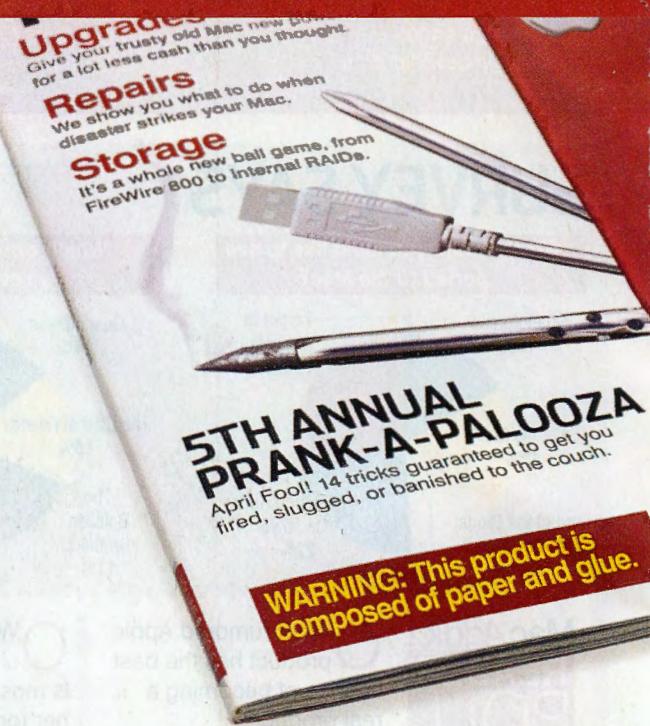
Whether readers inadvertently skipped reading or outright ignored our structural-durability warning label (see right) remains to be seen, but *MacAddict* recently received the following disturbing letter:

■ I read your mag in the sauna at my health club. One little problem: At over 190 degrees Fahrenheit, *MacAddict* comes unglued, so I end up with a pile of single pages by the time I'm done being cooked.—Vic Larson

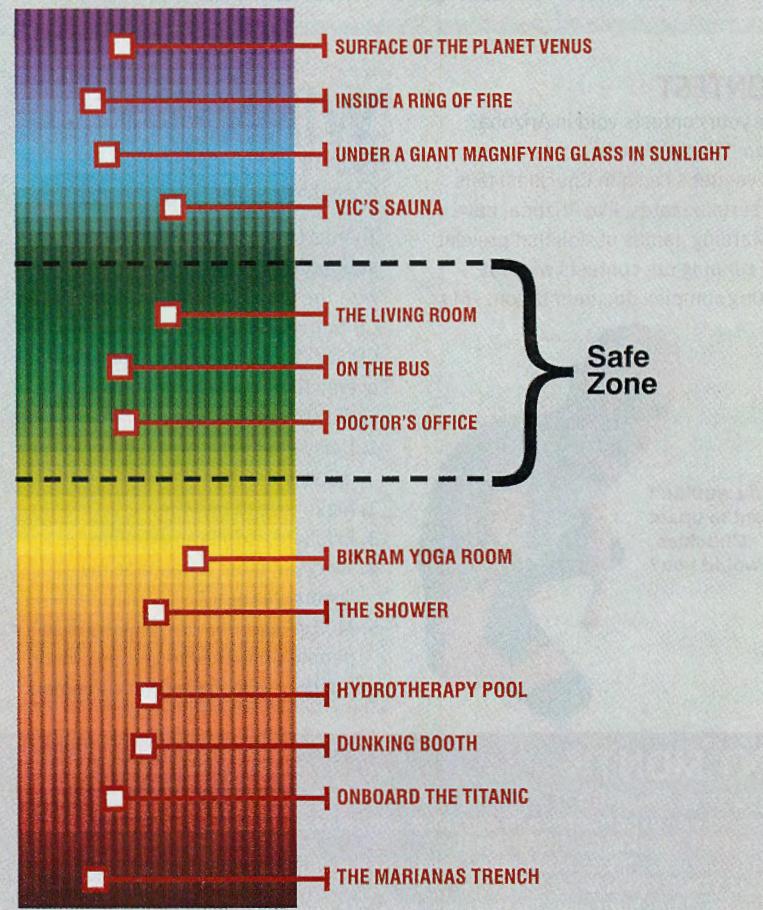
After reviewing the data behind our cautionary statement (see above), we thought it might be helpful to provide our readers with some guidelines for safe product use. Fundamental technological deficiencies in the stress capabilities of pulp-derived substances, such as paper, and chemically derived substances, such as glue, are implicit. After performing a complex variety of fatigue analyses, as well as thermal-nondestructive and bond-strength-integrity-of-adhesive-joint evaluations, we have determined that *MacAddict* is best read in cool, dry, unthreatening environments, such as your pantry. Excessive heat can bring your enjoyment of *MacAddict* to a potentially combustible end, and excessive humidity can at best make papier-mâché out of your magazine. Consult our structural integrity spectrum (see right) to determine the safety of your reading space.

OTHER READING PLACES TO AVOID:

- Crazy Pete's "bunker" out in them there woods
- the Temple of Doom
- radioactive areas of the Nevada desert
- hyperbaric oxygen chambers when undergoing treatment for flesh-eating bacteria
- Pottery Barn



MacAddict Structural Integrity Spectrum



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